

SEQUENCE LISTING

<110> Jacobs, Kenneth
 McCoy, John M.
 LaVallie, Edward R.
 Collins-Racie, Lisa A.
 Evans, Cheryl
 Merberg, David
 Treacy, Maurice
 Agostino, Michael J.
 Steininger II, Robert J.
 Bowman, Michael R.
 DiBlasio-Smith, Elizabeth
 Widom, Angela

135

<120> SECRETED PROTEINS AND POLYNUCLEOTIDES ENCODING THEM

<130> 00766.000101.

<140>

<141>

<150> US 09/306,111

<151> 1999-05-06

<150> US 60/084,564

<151> 1998-05-07

<150> US 60/087,645

<151> 1998-06-02

<150> US 60/093,712

<151> 1998-07-22

<150> US 60/094,935

<151> 1998-07-31

<150> US 60/095,880

<151> 1998-08-10

<150> US 60/096,068

<151> 1998-08-11

<160> 180

<170> PatentIn Ver. 2.0

<210> 1

<211> 571

<212> DNA

<213> Homo sapiens

<400> 1

ttcttcgcca	ggctctctgc	tgactcaagt	tcttcagttc	acgatcttct	agttgcagcg	60
atgagtgcac	gagtgcagtc	aagatccaga	ggaagaggag	atggtcagga	ggctcccgat	120
gtggttgcat	tcgtggctcc	cgggtgaatct	cagcaagagg	aaccaccaac	tgacaatcag	180
gatattgaac	ctggacaaga	gagagaagga	acacctccga	tcgaagaacg	taaagtagaa	240
ggtgattgcc	aggaaatgga	tctggaaaag	actcggagtg	agcgtggaga	tggctctgat	300
gtaaaaagaga	agactccacc	taatcctaag	catgctaaga	ctaaagaagc	aggagatggg	360
cagccataag	ttaaaaaagaa	gacaagctga	agctacacac	atggctgatg	tcacattgaa	420

6069-74A.SEQ.txt

aatgtgactg aaaatttgaa aattctctca ataaagtttg agttttctct gaaaaaaaaa 480
 aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa 540
 aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa a 571

<210> 2
 <211> 102
 <212> PRT
 <213> Homo sapiens

<400> 2
 Met Ser Ala Arg Val Arg Ser Arg Ser Arg Gly Arg Gly Asp Gly Gln
 1 5 10 15
 Glu Ala Pro Asp Val Val Ala Phe Val Ala Pro Gly Glu Ser Gln Gln
 20 25 30
 Glu Glu Pro Pro Thr Asp Asn Gln Asp Ile Glu Pro Gly Gln Glu Arg
 35 40 45
 Glu Gly Thr Pro Pro Ile Glu Glu Arg Lys Val Glu Gly Asp Cys Gln
 50 55 60
 Glu Met Asp Leu Glu Lys Thr Arg Ser Glu Arg Gly Asp Gly Ser Asp
 65 70 75 80
 Val Lys Glu Lys Thr Pro Pro Asn Pro Lys His Ala Lys Thr Lys Glu
 85 90 95
 Ala Gly Asp Gly Gln Pro
 100

<210> 3
 <211> 2709
 <212> DNA
 <213> Homo sapiens

<400> 3
 gaggaacct ctcgctgggg ctaggagttc ggcggggagc gcgccggcgg ctgcggagct 60
 ggcaggtgag aagcgtctgc acctggcggg cgatggcgcc cgatgcgggc gccccgggat 120
 agcgtgggag aggcgtgcgg gccccggcgc gcacgccccg acctctcccc agccctggcg 180
 tgggcccagc ccggcccagg cagcaatggg gttcctgcag ctgctggctg tagcgggtgt 240
 ggcattccga caccgggtgg ctggtgcagc cgaggtcttc gggaattcca gcgaggggtc 300
 tattgaattt tctgtgggga aatttagata ctccgagctc aataggccct ttccagagga 360
 agctattttg catgatattt caagcaatgt gacttttctt attttccaaa tacactcaca 420
 gtatcagaat acaactgttt ctttttctcc gactctcctt tccaattcct cggaaacagg 480
 cactgccagt ggactgggtt tcatccttag accagagcag agtacatgca ctgggtactt 540
 ggggacttca ggcatacagc ctgtccagaa tatggctatc ctactctcct actcagaaaag 600
 agatcctgtc cctggagggt gtaatttggg gttcgattta gatattgatc ccaacattta 660
 ctggaggtat aatttctttg aaacgactat caagtttgcc ccagcaaacc taggctatgc 720
 gagaggcgta gatccccac catgtgacgc tgggacagac caggactcca ggtggagggt 780
 gcagtatgat gtctatcagt attttctgcc tgagaatgac ctactgagg agatgttgct 840
 gaagcatctg cagaggatgg tcagtgtgcc ccagggtgaag gccagtgtc tcaagggtgg 900
 taccctaaca gctaattgata agacaagtgt ttccttctcc tccctcccgg gacaagggtg 960
 catatacaat gtcattgttt gggaccggt tctaaatata tctgctgcct acattcctgc 1020
 tcacacatac gcttgacgtt ttgaggcagg agagggtagt tgtgcttccc taggaagagt 1080
 gtcttccaaa gtgttcttca ctctttttgc cctgcttggg ttcttcattt gtttctttgg 1140
 acacagattc tggaaaacag aattattctt cataggcttt atcatcatgg gattcttctt 1200
 ttatatactg attacaagac tgacacctat caagtatgat gtgaatctga ttctgacagc 1260
 tgtcactgga agcgtcgggt gaatgttctt ggtagctgtg tggtagcgat ttggaatcct 1320
 cctgactctg atgctctgtg ttggactagt gctgggggtc ctcatctcgt cagtgcactt 1380
 ctctactcca ctgggaaacc taaagatttt tcatgatgat ggtgtattct gggtcacttt 1440
 ctcttgcata gctatcctca ttccagtagt tttcatgggc tgcctaagaa tactgaacat 1500

6069-74A.SEQ.txt

```

actgacttgt ggagtcattg gctcctattc ggtggtttta gccattgaca gttactggtc 1560
cacaagcctt tcctacatca ctttgaacgt actcaagaga gcgctcaaca aggatttcca 1620
cagagctttc acaaatgtgc cttttcaaac taatgacttc attatcctgg cagtatgggg 1680
catgctggct gtaagtggaa ttacgttaca gattcgaaga gagagaggac gaccgttctt 1740
ccctccccac ccatacaagt tatggaagca agagagagag cgccgagtga caaacattct 1800
ggaccctagc taccacattc ctccattgag agagaggctc tatggccgat taaccagat 1860
taaagggctc ttccagaagg agcagccagc tggagagaga acgcctttgc ttctgtagat 1920
gcccaggggc ttggtcagtg tgcctcagct ttggagttca tgcctggagt gggtcaacag 1980
tctctggtg aagtctaata agagatcagg catatatatc tgttctttgc ataataattat 2040
ggtgccctta ttgatatatg gtaaggggtg actaggggat taggatgatt gtaagagaat 2100
gagaaagatg accaaaagggt tgggtgtagg gaggcttttt cttatttcca aatacttgag 2160
aaattacctt ttggtttaca aatctatgat caacttattc cattaaatag atacattaaa 2220
aaaattaaaa actgattctt ctgcagagca ctggtgtttc tttttataac cccttgaaac 2280
aagtctctca cstgagcctg tctaaacttt cggagggagt ttattattga gtctttatct 2340
gtgacagtat ttggagattt agggatttga tacttaggcc tttgaatttt agaatacaaa 2400
aagagaagca agccagacat ggtggctcac acctgtaatc ccaatactgg gaggccaagg 2460
tgggagtatc gcttgagccc aggagtttga gaccgacatg ggcaacatga caagacccca 2520
tctctgcaaa aagattaaaa agttggccag gcatggtggc acatgcctgc tcccagctcc 2580
cggggagact gagatggggg gatcccctgg agccctgaag attgaggctg cagtgagcct 2640
tgattgtgtc actgcactcc agcttggggtg acagagaccc tgtctcgaga aattaaaaaa 2700
aaaaaaaaa

```

<210> 4
 <211> 570
 <212> PRT
 <213> Homo sapiens

<400> 4
 Met Gly Phe Leu Gln Leu Leu Val Val Ala Val Leu Ala Ser Glu His
 1 5 10 15
 Arg Val Ala Gly Ala Ala Glu Val Phe Gly Asn Ser Ser Glu Gly Leu
 20 25 30
 Ile Glu Phe Ser Val Gly Lys Phe Arg Tyr Phe Glu Leu Asn Arg Pro
 35 40 45
 Phe Pro Glu Glu Ala Ile Leu His Asp Ile Ser Ser Asn Val Thr Phe
 50 55 60
 Leu Ile Phe Gln Ile His Ser Gln Tyr Gln Asn Thr Thr Val Ser Phe
 65 70 75 80
 Ser Pro Thr Leu Leu Ser Asn Ser Ser Glu Thr Gly Thr Ala Ser Gly
 85 90 95
 Leu Val Phe Ile Leu Arg Pro Glu Gln Ser Thr Cys Thr Trp Tyr Leu
 100 105 110
 Gly Thr Ser Gly Ile Gln Pro Val Gln Asn Met Ala Ile Leu Leu Ser
 115 120 125
 Tyr Ser Glu Arg Asp Pro Val Pro Gly Gly Cys Asn Leu Glu Phe Asp
 130 135 140
 Leu Asp Ile Asp Pro Asn Ile Tyr Leu Glu Tyr Asn Phe Phe Glu Thr
 145 150 155 160
 Thr Ile Lys Phe Ala Pro Ala Asn Leu Gly Tyr Ala Arg Gly Val Asp
 165 170 175
 Pro Pro Pro Cys Asp Ala Gly Thr Asp Gln Asp Ser Arg Trp Arg Leu
 180 185 190

6069-74A.SEQ.txt

Gln Tyr Asp Val Tyr Gln Tyr Phe Leu Pro Glu Asn Asp Leu Thr Glu
 195 200 205
 Glu Met Leu Leu Lys His Leu Gln Arg Met Val Ser Val Pro Gln Val
 210 215 220
 Lys Ala Ser Ala Leu Lys Val Val Thr Leu Thr Ala Asn Asp Lys Thr
 225 230 235 240
 Ser Val Ser Phe Ser Leu Pro Gly Gln Gly Val Ile Tyr Asn Val
 245 250 255
 Ile Val Trp Asp Pro Phe Leu Asn Thr Ser Ala Ala Tyr Ile Pro Ala
 260 265 270
 His Thr Tyr Ala Cys Ser Phe Glu Ala Gly Glu Gly Ser Cys Ala Ser
 275 280 285
 Leu Gly Arg Val Ser Ser Lys Val Phe Phe Thr Leu Phe Ala Leu Leu
 290 295 300
 Gly Phe Phe Ile Cys Phe Phe Gly His Arg Phe Trp Lys Thr Glu Leu
 305 310 315 320
 Phe Phe Ile Gly Phe Ile Ile Met Gly Phe Phe Phe Tyr Ile Leu Ile
 325 330 335
 Thr Arg Leu Thr Pro Ile Lys Tyr Asp Val Asn Leu Ile Leu Thr Ala
 340 345 350
 Val Thr Gly Ser Val Gly Gly Met Phe Leu Val Ala Val Trp Trp Arg
 355 360 365
 Phe Gly Ile Leu Ser Ile Cys Met Leu Cys Val Gly Leu Val Leu Gly
 370 375 380
 Phe Leu Ile Ser Ser Val Thr Phe Phe Thr Pro Leu Gly Asn Leu Lys
 385 390 395 400
 Ile Phe His Asp Asp Gly Val Phe Trp Val Thr Phe Ser Cys Ile Ala
 405 410 415
 Ile Leu Ile Pro Val Val Phe Met Gly Cys Leu Arg Ile Leu Asn Ile
 420 425 430
 Leu Thr Cys Gly Val Ile Gly Ser Tyr Ser Val Val Leu Ala Ile Asp
 435 440 445
 Ser Tyr Trp Ser Thr Ser Leu Ser Tyr Ile Thr Leu Asn Val Leu Lys
 450 455 460
 Arg Ala Leu Asn Lys Asp Phe His Arg Ala Phe Thr Asn Val Pro Phe
 465 470 475 480
 Gln Thr Asn Asp Phe Ile Ile Leu Ala Val Trp Gly Met Leu Ala Val
 485 490 495
 Ser Gly Ile Thr Leu Gln Ile Arg Arg Glu Arg Gly Arg Pro Phe Phe
 500 505 510
 Pro Pro His Pro Tyr Lys Leu Trp Lys Gln Glu Arg Glu Arg Arg Val
 515 520 525

6069-74A.SEQ.txt

Thr Asn Ile Leu Asp Pro Ser Tyr His Ile Pro Pro Leu Arg Glu Arg
530 535 540

Leu Tyr Gly Arg Leu Thr Gln Ile Lys Gly Leu Phe Gln Lys Glu Gln
545 550 555 560

Pro Ala Gly Glu Arg Thr Pro Leu Leu Leu
565 570

<210> 5
<211> 3063
<212> DNA
<213> Homo sapiens

<400> 5
cgaggcgcggtgtggtgcccgtggcgccctcgctgggctgca
agatggacccggcgccctcgctgagcacttaccggctgcc
ccgtgcccgtcgtagaagggtgctgggaaaatgactatct
acggagagtgcatcactgcccacagcttgaggagggtca
agtggaccacatcactgcccacagcttgaggagggtgca
tagagattccggtacattatgcagggcaatcaagctgct
aggagccagtgcaatatttcacagtggtgaggagggtgc
tgtacgtcatggaggatatacattcaacgtgaagggtgc
acactgaagttacaacatcaccctgtgtactggggatga
gcagaaatcctcatgcaaaacacattcaagaaaagtcac
aagattgggaagctcaattccatcagcaagctgggaaaag
tgtatgaatcaccggaccaaagcagaaagcattgccttccat
agcaccgccaggtcccctggaacttcagtgcaaaaggcc
tgtggagaaaaccaggtctctgtgaatgtgactgtgcca
ataccgacctccacttcatccgtgaggggcaacgctataag
gacgggtggtgtttgtctgtgtgctgcgggaacaagaatc
gcacttgactgtccccaagttcagcctcccagaacacctg
cgaaaccctgtgccatcactggctaggtatctgccaaagaa
ttcacggggtgtccgtgatgtgaaaaccgaactgcgtgcc
gggtcgggtgctcttgcccacacacgtgcccaattcgctc
caccagttccctccaccgactctcggtctgtgtgtatggc
tgaggtgaaccttcatgggtgcagggacctggggggagat
catcctgcccatacaggactctggagatagtgggagcgac
tgaagaatcagcaggcatcccgggaaagtcagaacttccc
ggaaggcaagcccagccatcagcctctcacgtctctctg
tcagtttagaggttctgtgctgatccaaatgtcgacttct
tctgggagcgcagtgaagcttccagatactgccctacct
atctgaagccgtcagagaagaatgccggctcctgaacgcc
cgaaaagcctttgtccaccagtccctccatcctcctcgc
acagactcgtcttcccagcccaccttgtctactatttct
cactaaaactgacacaaatcttctgaaagcactcctgtt
agtgaaaactgattctgtggacctgaaatcccgtttgga
gtcctctcggctctcatggcctaaccattaattcaggagca
tgacttctctgctggatccaaagcaggagttagttaccct
accaaagagaaactgcccagcaccttttgaatttgatggc
cactagcccagtcactgcaagaattcagtagcagcgtctct
ctactctctggagacacagatgtgaaatcttgcagct
gtcatgcccctgccttaccctccagggtctccaaaactagt
aacatctcctttgctctctgaatttgatggtgctgaggaa
agatctctcgaggaccagattttgttaaaagggcatg
ctaccctttctatctccgtccatctccaactctctata
cccatggcagccacctgctacatatcaggatctctata
acggttcattggtttgtccgaagatgtcatcattcttt
gaacctgcttgttcagctaaaggaagaaatcctctcagag
gcaggtgaagaagataatgaattcatttaaggctggagg
cccccgccaatgcatggaacaactgatcatgcgtgtgc

6069-74A.SEQ.txt

```

acaatttcat gtttttgcac taaaaacctt ctctgtaaag agggataaga gaaactctta 2820
ctatgcagat tacgtttttg aatggtgaac aggcattttt gtacatcaat aaaaatgctg 2880
tacagaacac ttggagggtg gccttgtagc tctactcaaca aacactcagc agctgctaaa 2940
agaaaaaaag gcatgtgcag agaaatcatt cttacccaag taggtttatg tgagaaggta 3000
tgatatttat tacaaaatag ccaaagctga aagacataaa aatcttttaa aaaaaaaaaa 3060
aaa 3063

```

<210> 6
 <211> 647
 <212> PRT
 <213> Homo sapiens

<400> 6
 Met Gln Lys Gly Glu His Thr Ile Arg His Ile Val Glu Lys Thr Arg
 1 5 10 15
 Leu Pro Val Asn Val Thr Val Pro Ser Pro Pro Pro Arg Asn Pro Tyr
 20 25 30
 Asp Leu His Phe Ile Arg Glu Gly His Arg Tyr Lys Phe Val Asn Ile
 35 40 45
 Gln Thr Lys Thr Val Val Val Cys Cys Val Leu Arg Asp Asn Lys Ile
 50 55 60
 Leu Pro Met His Phe Pro Leu His Leu Thr Val Pro Lys Phe Ser Leu
 65 70 75 80
 Pro Glu His Leu Val Lys Gly Glu Ser Trp Pro Glu Thr Leu Val His
 85 90 95
 His Trp Leu Gly Ile Cys Gln Glu Gln Phe Asp Ile Asp Glu Tyr Ser
 100 105 110
 Arg Ala Val Arg Asp Val Lys Thr Asp Trp Asn Glu Glu Cys Lys Ser
 115 120 125
 Pro Lys Lys Gly Arg Cys Ser Gly His Asn His Val Pro Asn Ser Leu
 130 135 140
 Ser Tyr Ala Arg Asp Glu Leu Thr Gln Ser Phe His Arg Leu Ser Val
 145 150 155 160
 Cys Val Tyr Gly Asn Asn Leu His Gly Asn Ser Glu Val Asn Leu His
 165 170 175
 Gly Cys Arg Asp Leu Gly Gly Asp Trp Ala Pro Phe Pro His Asp Ile
 180 185 190
 Leu Pro Tyr Gln Asp Ser Gly Asp Ser Gly Ser Asp Tyr Leu Phe Pro
 195 200 205
 Glu Ala Ser Glu Glu Ser Ala Gly Ile Pro Gly Lys Ser Glu Leu Pro
 210 215 220
 Tyr Glu Glu Leu Trp Leu Glu Glu Gly Lys Pro Ser His Gln Pro Leu
 225 230 235 240
 Thr Arg Ser Leu Ser Glu Lys Asn Arg Cys Asp Gln Phe Arg Gly Ser
 245 250 255
 Val Arg Ser Lys Cys Ala Thr Ser Pro Leu Pro Ile Pro Gly Thr Leu
 260 265 270

6069-74A.SEQ.txt

Gly Ala Ala Val Lys Ser Ser Asp Thr Ala Leu Pro Pro Pro Pro Val
 275 280 285
 Pro Pro Lys Ser Glu Ala Val Arg Glu Glu Cys Arg Leu Leu Asn Ala
 290 300
 Pro Pro Val Pro Pro Arg Ser Ala Lys Pro Leu Ser Thr Ser Pro Ser
 305 310 315 320
 Ile Pro Pro Arg Thr Val Lys Pro Ala Arg Gln Gln Thr Arg Ser Pro
 325 330 335
 Ser Pro Thr Leu Ser Tyr Tyr Ser Ser Gly Leu His Asn Ile Val Thr
 340 345 350
 Lys Thr Asp Thr Asn Pro Ser Glu Ser Thr Pro Val Ser Cys Tyr Pro
 355 360 365
 Cys Asn Arg Val Lys Thr Asp Ser Val Asp Leu Lys Ser Pro Phe Gly
 370 375 380
 Ser Pro Ser Ala Glu Ala Val Ser Ser Arg Leu Ser Trp Pro Asn His
 385 390 395 400
 Tyr Ser Gly Ala Ser Glu Ser Gln Thr Arg Ser Asp Phe Leu Leu Asp
 405 410 415
 Pro Ser Arg Ser Tyr Ser Tyr Pro Arg Gln Lys Thr Pro Gly Thr Pro
 420 425 430
 Lys Arg Asn Cys Pro Ala Pro Phe Asp Phe Asp Gly Cys Glu Leu Leu
 435 440 445
 Ala Ser Pro Thr Ser Pro Val Thr Ala Glu Phe Ser Ser Ser Val Ser
 450 455 460
 Gly Cys Pro Lys Ser Ala Ser Tyr Ser Leu Glu Ser Thr Asp Val Lys
 465 470 475 480
 Ser Leu Ala Ala Gly Val Thr Lys Gln Ser Thr Ser Cys Pro Ala Leu
 485 490 495
 Pro Pro Arg Ala Pro Lys Leu Val Glu Glu Lys Val Ala Ser Glu Thr
 500 505 510
 Ser Pro Leu Pro Leu Lys Ile Asp Gly Ala Glu Glu Asp Pro Lys Ser
 515 520 525
 Gly Ser Pro Asp Leu Ser Glu Asp Gln Tyr Phe Val Lys Lys Gly Met
 530 535 540
 Gln Asp Ile Phe Ser Ala Ser Tyr Pro Phe Ser Ser Pro Leu His Leu
 545 550 555 560
 Gln Leu Ala Pro Arg Ser Cys Gly Asp Gly Ser Pro Trp Gln Pro Pro
 565 570 575
 Ala Asp Leu Ser Gly Leu Ser Ile Glu Glu Val Ser Lys Ser Leu Arg
 580 585 590
 Phe Ile Gly Leu Ser Glu Asp Val Ile Ser Phe Phe Val Thr Glu Lys
 595 600 605

6069-74A.SEQ.txt

Ile Asp Gly Asn Leu Leu Val Gln Leu Thr Glu Glu Ile Leu Ser Glu
610 615 620

Asp Phe Lys Leu Ser Lys Leu Gln Val Lys Lys Ile Met Gln Phe Ile
625 630 635 640

Asn Gly Trp Arg Pro Lys Ile
645

<210> 7
<211> 892
<212> DNA
<213> Homo sapiens

<400> 7
ggcagcagct cgtgcactca tggcgacccg gaacccccct cccaagact atgaaagtga 60
tgacgactct tatgaagtgt tggatttaac tgagtatgcc agaagacacc agtgggtggaa 120
tcgagtgttt ggccacagtt cgggacctat ggtagaaaaa tactcagtag ctaccagat 180
tgtaattgggt ggcgttactg gctgggtgtgc aggatttctg ttccagaaag ttggaaaact 240
tgcagcaact gcagtaggtg gtggctttct tcttcttcag attgctagtc atagtggcta 300
tgtgcagatt gactggaaga gagttgaaaa agatgtaaat aaagcaaaaa gacagattaa 360
gaaacgagcg aacaaagcag cacctgaaat caacaattta attgaagaag caacagaatt 420
tatcaagcag aacattgtga tatccagtgg atttgtggga ggctttttgc tcggacttgc 480
atcttaagga catgaatatt ctcccataac ggattcaact atgagaagag aagtggcagc 540
aataaggcag tctctcaaaa gtcatactgc cagagtctct agggcaagga gaaacaacta 600
gctggacaat actcaattca caacttagca ttttgccatc tgaagcttgg caaactagta 660
tctgctgtaa aacaacctat atggtatgtg aaccgtagta ttcctgagca aaacgtggct 720
ttcatcgctt tgtaaaaaatt tgcattctgt tagaaactag cctataaaat atcaccattg 780
gatgtagata tggagagaaa agaaatatgt tgggtttatt gcttagcgaa atattctctt 840
tttattttaa taaaatgttc ttcattgtgt tttaaaaaaa aaaaaaaaaa aa 892

<210> 8
<211> 155
<212> PRT
<213> Homo sapiens

<400> 8
Met Ala Thr Arg Asn Pro Pro Pro Gln Asp Tyr Glu Ser Asp Asp Asp
1 5 10 15
Ser Tyr Glu Val Leu Asp Leu Thr Glu Tyr Ala Arg Arg His Gln Trp
20 25 30
Trp Asn Arg Val Phe Gly His Ser Ser Gly Pro Met Val Glu Lys Tyr
35 40 45
Ser Val Ala Thr Gln Ile Val Met Gly Gly Val Thr Gly Trp Cys Ala
50 55 60
Gly Phe Leu Phe Gln Lys Val Gly Lys Leu Ala Ala Thr Ala Val Gly
65 70 75 80
Gly Gly Phe Leu Leu Leu Gln Ile Ala Ser His Ser Gly Tyr Val Gln
85 90 95
Ile Asp Trp Lys Arg Val Glu Lys Asp Val Asn Lys Ala Lys Arg Gln
100 105 110
Ile Lys Lys Arg Ala Asn Lys Ala Ala Pro Glu Ile Asn Asn Leu Ile
115 120 125

6069-74A.SEQ.txt

Glu Glu Ala Thr Glu Phe Ile Lys Gln Asn Ile Val Ile Ser Ser Gly
130 135 140

Phe Val Gly Gly Phe Leu Leu Gly Leu Ala Ser
145 150 155

<210> 9
<211> 1850
<212> DNA
<213> Homo sapiens

<400> 9
cactcctact gcggctgcta tgaagcttac tggttgtgat gtgttataat ttagtctgtt 60
tttttgattg aatgcagttt aatgtttcca gaaagccaaa gtaattttct ttccagatat 120
gcaaggcttt ggtgggtcca aaaaatgtct atcacaagcc attttttcct ttccctctct 180
cgaaaagtta aaatatctat gtgttattcc caaacctctt tacctatgta tctgcctgtc 240
tgtccatcat ctcccttcct ccctatctct gtgtatctgg atggcagccg ctgcccargg 300
gagtggctgt ggggagggca ggtactgtct ttgcctgtgg gtccagctga gccatccctg 360
ctgggtgatg ctgggcaaga cccttgccc gtctgggctc tggcttcctc acttggtgaaa 420
tgagcgggaa gatgactctc agttccttcc acctcttaga catggtgagg taacagacat 480
caaaagcttt tctgaaatct tcagaagaaa tagttccatt acagaaaact ctcaaaaata 540
aatagtagtg aaaactttta aaaactctca ttggagtaag tcttttcaag atgatcctcc 600
acaatggagg cagcgttcct acttgctatc acacagctga agacattgtt tcttaggtgt 660
gaaatcgggg acaaaggaca aacagagaca cagggcattg ttcattggag gcatcgtcac 720
cctcctgggt gttctgtggg aatttcctgt gtgaggaaaa cgtggccaca gggttgtgct 780
gtacccaccc ttccccggcg agatggccct cggcctgtgc cgctgcttcc accctcgcca 840
ctccatggca gcttttggtc tgtttccggc tctgcccctc gccctgaact ctcatccggc 900
ttgtacctgc ctgctggacc cctccacctg gaggccagcc catgtctcag gcccgacct 960
agcctcttct cctcaaattc taagtgtttt ctcttttaggt ttccctggct ttgtgaatgg 1020
atcatgtgtc tctaggtata aacctgacct catctctcca cccggcttac ctccaccaga 1080
tctcccagtg tctgtctcca tcttctacct gcagctgctc tgttctcatg gtcactgctg 1140
catcactgag tctggaccct tgttatcatt ttcaaactgg cctccttccc tcgttcccca 1200
cttcttaaag tcacctgtcc attgccacca gattaagctt tctccagcca gatcacctct 1260
ctctgagaaa cctccattga catggaaaca ccattgtctg gcacacatac tcacatactc 1320
accttccccg cttgatcccc acacatcttt ccagcctccc ctcccactcc actccctgct 1380
ccctcctcca cctcccatc ctctgtctc ccttcccctc tgaatccagc ccagcggggc 1440
ttctcctggc tccatcacat cacagaagta cctcctgctt ctgggtttta ttagagcctt 1500
ccccgattac attttcctct gaattttttc ctatctacat ttgatctgtc atgttttaaac 1560
cccctacttc taagggaact tctctaactc cttatctca tccccaaata gtgttttctt 1620
cctctgggtt cttataatgt tggatatcaat ctacagcat ttagtgcttc ctgcctgggtg 1680
tgacagttac ctgtgtgcat gtgcaatttc taatttccca cgctagactg tgagcttctt 1740
aaggcaagaa tcatgccttg ttggtttctg tattcctcat ggtgccaaac acagtgccctt 1800
ctacattgca ggcgctgaat aaacattttt aaagcaaaaa aaaaaaaaaa 1850

<210> 10
<211> 206
<212> PRT
<213> Homo sapiens

<400> 10
Met Ala Leu Gly Leu Cys Arg Cys Phe His Pro Arg His Ser Met Ala
1 5 10 15
Ala Phe Gly Leu Phe Pro Ala Leu Pro Ser Ala Leu Asn Ser His Pro
20 25 30
Ala Cys Thr Cys Leu Leu Asp Pro Ser Thr Trp Arg Pro Ala His Val
35 40 45
Ser Gly Pro Ala Leu Ala Ser Ser Pro Gln Ile Leu Ser Val Phe Ser
50 55 60

6069-74A.SEQ.txt

Leu Gly Phe Pro Gly Phe Val Asn Gly Ser Cys Val Ser Arg Tyr Lys
 65 70 75 80
 Pro Asp Ile Ile Ser Pro Pro Gly Leu Pro Pro Pro Asp Leu Pro Ser
 85 90 95
 Ser Val Ser Ile Phe Tyr Leu Gln Leu Leu Cys Ser His Gly His Cys
 100 105 110
 Cys Ile Thr Glu Ser Gly Pro Leu Leu Ser Phe Ser Asn Trp Pro Pro
 115 120 125
 Ser Leu Val Pro His Phe Leu Lys Ser Pro Val His Cys His Gln Ile
 130 135 140
 Lys Leu Ser Pro Ala Arg Ser Pro Leu Ser Glu Lys Pro Pro Leu Thr
 145 150 155 160
 Trp Lys His His Cys Leu Ala His Ile Leu Thr Tyr Ser Pro Ser Arg
 165 170 175
 Leu Asp Pro His Thr Ser Phe Gln Pro Pro Leu Pro Leu His Ser Leu
 180 185 190
 Leu Pro Pro Pro Pro Pro His Pro Leu Val Ser Pro Pro Leu
 195 200 205

<210> 11
 <211> 2216
 <212> DNA
 <213> Homo sapiens

<400> 11
 ctgtgaagtt actgtagtg aattgttttt tacgtttcat ttaataattg ctgctaaagg 60
 tgatgtttac tgataaatca ttttaaaatt tttttgtttt gaaaagtaaa tttatccccc 120
 atgatgttag atacatttaa attattaaagt cttttcagag atgagatggg gacaggaagt 180
 tattttgagc cttacaatat tatttagccc aataaaagat gcattgaagc tcttatatat 240
 tatgagtttg aaaaattttg aaggtagcat attgaagtga tctataaata tcttcagtcc 300
 tctctgaagt gtgggtattt ctcttatcta aaaaatacat acagtgactg tcttcaaadc 360
 tacttggttc ttgaccaaata argagctaata gggtaataga tacctttttg tttgtttgtt 420
 tgtttgtttg tttttgtttt ttttttttaa gggctcact cttttgcccga ggctggagtg 480
 cagtggcaca atcacggctc ccaggctaata gtttttattt ttaatttgta attttttttt 540
 tatttttttt gttgagatgg agttgctcca tgttgacacag gctgttctca aactcctaag 600
 ctcaagccat ctgcctgcst tggcctccca aagtgtggg attgtagaca taagccacct 660
 caccagcct atgaatatct ttctaacatk gtaagaatga ggtaatgttt ccatcagtct 720
 aatacagata tatttcttcc ctccaaaaca gtttattttg attgtttatt ttattttgat 780
 tgtaactccg tcataactyg acatggaaaa tgctatatac tatgaaaact tagctgaaag 840
 ggaagaattg ttttagaaaag acaatattta aaacaccgca ctgccaatat attgatcctt 900
 tatagttatt tcctaaaatg ctgttttcga aacattcctt tttcaccctg ttgtgtggct 960
 tagaccatc tcgtaatctg ttaattggaa agaggctaca gacaccagca gtgtgcgttc 1020
 tgcaggtaca cgctgccaaa gtaattcctg ctcatccatg ccctgtctct gtctctttta 1080
 gagtcatacc ttatttgagt ataggtggct taattttgct agacttcctg aaaacactaa 1140
 ggtggagtag cagaagtgat ttttagtcaca gttctgcggg agagcttaga ataacatcct 1200
 ctttgggag gtggtcttgg gtgcgtggat cttggtatac agtctttatt gtaagtctga 1260
 tacaaaaatgc taataaaattt aatgtttttc ttccctaatt tattggcata gttcttcagg 1320
 tagcacctca tttttattaa tgatattggg attaaactat aacaagctat atgtagacat 1380
 ttgatttaa ggacattgca gtgtttcaaa gatcccatca ttgcagcttg tatccttttag 1440
 atccaatcgg aaacttctgg agtcttacat taatgctcat ttgagctaata tagtaatctg 1500
 tttaaacaga tttggcaata ctttaaagat actgtagact atttatgtat agatagatca 1560
 tattaccat taaaagtctg ggggaaaaaaa ttttttaatt ttactcttct tatgtactga 1620
 aaactttttt taaaaaagggt gatgatgaag ttcattctgt agcagcagcg cagctatgct 1680
 ttaaaccaca caaaaaggctg tgtccagggt cagcctcctt cacccttcst gcccacggtg 1740

6069-74A.SEQ.txt

```

aggattgaat aaccaggact tggggatatk gtttgttgtc aggggttattc tgtgtggttaa 1800
ggaatatttg tttcacattt atacattttc tttttccact cacgtaagtt tctatcttga 1860
gagcatagtc caaagtgcaa aacttggtgt ttacaaggaa aattgtcttc cagaactcca 1920
ctgtcatcac tttcaccaaa gtggaagttt gcatgaatat gctcagaatc taatattcaa 1980
tgttctgtta cattgtaagt gaagtccagc tacaaaatag atttaataata ttgaatttat 2040
ttgtacatat gcagagtacg gtatttctgt atggaatctg ctttattcct atttttccca 2100
actctgatga gtagaatatt aaatgtgttg ttatggaaat acagattatt gcttctatag 2160
gaagataatt atgaaaataa aacctgaaac tatataaata taaaaaaaaa aaaaaa 2216

```

<210> 12
 <211> 126
 <212> PRT
 <213> Homo sapiens

<400> 12
 Met Leu Phe Ser Lys His Ser Phe Phe Thr Leu Leu Cys Gly Leu Asp
 1 5 10 15
 Pro Ser Arg Asn Leu Leu Ile Gly Lys Arg Leu Gln Thr Pro Ala Val
 20 25 30
 Cys Val Leu Gln Val His Ala Ala Lys Val Ile Pro Ala His Pro Cys
 35 40 45
 Pro Val Ser Val Ser Phe Arg Val Ile Pro Tyr Leu Ser Ile Gly Gly
 50 55 60
 Leu Ile Leu Leu Asp Phe Leu Lys Thr Leu Arg Trp Ser Ile Arg Ser
 65 70 75 80
 Asp Phe Ser His Ser Ser Ala Gly Glu Leu Arg Ile Thr Ser Ser Phe
 85 90 95
 Gly Arg Trp Ser Trp Val Arg Gly Ser Trp Tyr Thr Val Phe Ile Val
 100 105 110
 Ser Leu Ile Gln Asn Ala Asn Lys Phe Asn Val Phe Leu Pro
 115 120 125

<210> 13
 <211> 1426
 <212> DNA
 <213> Homo sapiens

<400> 13
 ctgggtctcc aggggggagag cctggccctg tcctttgcta cccagggtcg cccccaggcc 60
 catgaagcca ataggagagc gtgtggcact ggcccacaaa ctgtccctgt cctgtcttcc 120
 tcccagagcca tggcctctgc tagctccacc ttgaaggagc cccccacatc ctcccctaca 180
 tcccagagat gccaccactt gtgtctccac aatgtgtctc tgcccacccg ggttccgcac 240
 tgtccgaccc ctgcacacca ctcatgtcac cacggcgtgc atcatgttca tcccacatca 300
 tttatttaag cttttctttg cttgtagggc attttgtatg tagagcagtt gaaaacagaa 360
 cctcagaact taacatctgt cctgatgtta aagtgtcttt catgaccacc ctgttatcta 420
 tgtatatgta aagttaagga tgagatctta agtttacaat taaaaactca gtactcaata 480
 tttaatattc tactcgagct ttatggaaagc caaatcatgc atgtgtgtgt gtgcgtgtgt 540
 gcaagctttg aacctccttc cacagccgca tcttctcatg acacaaagct tttgataagt 600
 actttcctgt gggtcgctca gggcctcata gcatctcatt caattacaag aatagaggcc 660
 agacacggtg gcgcatgcct gtagtcccag ctaactggga ggctgaggca ggaggatcac 720
 ttgagcccag gagattgagg ctgcagttag catgatcgcg aactgcaact ccagcctggg 780
 tgacggtgag actttgtctc aaaaaaaaaa aaaaaacaa tgggaaggcag acagcaagtc 840
 cctgaggaca catcacacag tgtcctgtag ctaagtgtct agggaaaaaac aaaaaactcca 900
 aaccttcag tggatgagga caaggtcgca gaaaggcatt ctgttgacag atgaacagcc 960
 gaaagctggc cagaccctcc tgtatgcctc tgccctgtgc ctgtgggttg aggggtctctg 1020

accaggaggc	cacctacagc	aggaagtgag	gctgccatgt	ttccttgaga	cacagctgcc	1080
tctccccagc	tctgtccctg	tagtcacctg	ccggtgggcg	aggatcctct	ccctgggata	1140
agcactccca	gccccgttta	tcagaaacac	aggcaaggaa	attggaactg	ccaccacgac	1200
cagcatggtg	gctcaattgg	ttggttgctt	tgctcagttg	ctctctcgtt	tgtaagggtt	1260
tttaataagt	acgttttgca	taatgtcctt	taatgggttt	gtaatatattg	taacgggtttt	1320
agcagcctat	aacttttcag	ctggtgcttt	tacttaaggga	aaaaaacaaat	ttgtaaatac	1380
agaacattgt	ttaaaagaca	taaccataga	aaaaaaaaaaa	aaaaaa		1426

```

<400> 14
Met Pro Pro Leu Val Ser Pro Gln Cys Ala Pro Ala His Pro Gly Ser
  1          5          10          15
Ala Leu Ser Asp Pro Cys Thr Pro Leu Met Ser Pro Arg Arg Ala Ser
          20          25          30
Cys Ser Ser Pro Ser Ile Tyr Leu Ser Leu Ser Leu Val Gly His
      35          40          45
Phe Val Cys Arg Ala Val Glu Asn Arg Thr Ser Glu Leu Asn Ile Cys
    50          55          60
Pro Asp Val Lys Val Leu Phe Met Thr Thr Leu Leu Ser Met Tyr Met
  65          70          75          80

```

<400>	15						
gaagcggtctg	ctgtaggcgc	cacggagcg	agcgggcgctg	cggagcgggc	gacagtggcg	60	
tgggatctgc	ctctctgcga	gcagctggga	gcggcgccgcg	cggcgccatg	agcgggggca	120	
cccccttacat	cggcagaag	atcacctca	tctccaagcg	ggagattccg	tacgagggca	180	
ttctctaacac	catcgacacc	gaaaactcca	ccgtagccct	tgccaaagt	cagtcctttg	240	
tcataagaaga	cagaccgaca	gatcgctcaa	taccacctcg	agatgaagtc	tttgaataca	300	
ttatatctcg	tgggagtgc	attaaagacc	ttactgtttg	tgagccacca	aaaccacagt	360	
gttctttgcc	tcaagaccca	gctattgttc	agtcctcact	aggctcatcg	acttcttcat	420	
tccagttccat	gggttcttat	ggaccttttg	gcaggatgccc	cacatacagt	cagttcagtc	480	
cgaattctctt	agttgggcag	cagtttgtgt	ctgttgtgtg	tgctggaagc	tctttgacat	540	
cttttgaac	agaacatca	aacagtggtta	ccttacccca	aagtatgctg	gttgggtctg	600	
cctttacaca	ggatacaaga	tctctaaaaa	cacagttatc	tcaaggctgc	tcaagccctc	660	
agtttagaccc	tttgagaaaa	agcccaacca	tggaacaagc	agtgagacc	gcctcagccc	720	
acttacctgc	tccagcagct	gttggggaga	ggagtcctgt	atcaaccagg	cctttgccat	780	
ctgccagcca	aaaggcagga	gagaaatagg	agcacaggca	agctgaagta	cacaaagtgt	840	
caaggccaga	aaatgagcaa	ctcagaaatg	ataacaagag	acaagtagct	ccaggtgctc	900	
cttcagctcc	aagggagggg	cgtgggggtc	atcggggtgg	caggggaaga	tttgggtattc	960	
ggcgagatgg	gccaatgaaa	tttgagaaag	actttgactt	tgaagtgca	aatgcacaat	1020	
tcaacaagga	agagattgac	agagagtttc	ataataaact	taaattaaaa	gaagataaac	1080	
ttgagaaaaa	ggagaagcct	gtaaattggtg	aagataaagg	agactcagga	gttgataccc	1140	
aaaaacagtga	aggaatagcc	gatgaagaag	atccacttgg	acctaatgtc	tattatgaca	1200	
aaaactaaatc	cttctttgat	aatatttctt	gtgatgacaa	tagagaacgg	agaccaacct	1260	
gggctgaaga	aagaagatta	aatgctgaaa	catttggaat	cccacttcgt	caaaccctg	1320	
gccgtggggg	atacagaggc	agaggaggtc	ttggtttccg	tggtggcaga	gggcgtgggtg	1380	
gtggcagagg	tggtagcttc	actgcccctc	gaggatttgc	cggttggattc	agagcaggttc	1440	
gtggggggccg	ggagttttgc	gattttgaat	ataggaataac	cacagctttt	ggaccgtaaa	1500	
aggtctggat	tgatcgtact	gctttctgaa	agaaagacaa	caaagtgtgt	gcatagtcta	1560	
caacaagtc	tctgaaaata	ggtgaatttc	tagctcttca	tggctctgaa	cattgatttc	1620	

6069-74A.SEQ.txt

```

agtcttttgca aagaatgaag aagtgaattc gctgtacatt tgtcaccagc actggggtttt 1680
tgtttttttgt ttgttttttcc gcttaatttc aaagataaaa tgcagttact tttggggggtg 1740
gaaggctcat cttaaaacat gagcattaaa tatatttgga atagcagaag gttaagtaat 1800
ttcttatgta tagttaaaact aaagcagtac ttcagtggga cttacaagt attttttcat 1860
cactgaaagg tttttttttt tttatcacta aattgtattt ggcaattgca agttgcctgc 1920
agatagggcc gtgatactgt gttttgagcc acagaagggt gtgtgtgtgt gtgtgtgtgt 1980
gtgtgtgtgt gtgtgtgtgt gtatgtgtgt gtccttttcc tcctttcttt tggggaatcc 2040
tgtaatatga ggtagcttat ttcgtcaatt aattagggtg ctggatggtg gagaattttg 2100
tcagtcaact atgtacacac agtaaatact gtttcttagg caaaggtaac ttttttatat 2160
agttgtaaaa ttccattata ttccattgcc aaagaaacat taagaccttt gtatagctgt 2220
ataaaaaagca actaattttt taaagaaata aacattttta agtccaaaaa aaaaaaaaaa 2280
aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa 2340
aaaaaaaaaa aaaaaaaaaa aaaa

```

<210> 16
 <211> 463
 <212> PRT
 <213> Homo sapiens

<400> 16
 Met Ser Gly Gly Thr Pro Tyr Ile Gly Ser Lys Ile Ser Leu Ile Ser
 1 5 10 15
 Lys Ala Glu Ile Arg Tyr Glu Gly Ile Leu Tyr Thr Ile Asp Thr Glu
 20 25 30
 Asn Ser Thr Val Ala Leu Ala Lys Val Arg Ser Phe Gly Thr Glu Asp
 35 40 45
 Arg Pro Thr Asp Arg Pro Ile Pro Pro Arg Asp Glu Val Phe Glu Tyr
 50 55 60
 Ile Ile Phe Arg Gly Ser Asp Ile Lys Asp Leu Thr Val Cys Glu Pro
 65 70 75 80
 Pro Lys Pro Gln Cys Ser Leu Pro Gln Asp Pro Ala Ile Val Gln Ser
 85 90 95
 Ser Leu Gly Ser Ser Thr Ser Ser Phe Gln Ser Met Gly Ser Tyr Gly
 100 105 110
 Pro Phe Gly Arg Met Pro Thr Tyr Ser Gln Phe Ser Pro Ser Ser Leu
 115 120 125
 Val Gly Gln Gln Phe Gly Ala Val Gly Val Ala Gly Ser Ser Leu Thr
 130 135 140
 Ser Phe Gly Thr Glu Thr Ser Asn Ser Gly Thr Leu Pro Gln Ser Ser
 145 150 155 160
 Ala Val Gly Ser Ala Phe Thr Gln Asp Thr Arg Ser Leu Lys Thr Gln
 165 170 175
 Leu Ser Gln Gly Arg Ser Ser Pro Gln Leu Asp Pro Leu Arg Lys Ser
 180 185 190
 Pro Thr Met Glu Gln Ala Val Gln Thr Ala Ser Ala His Leu Pro Ala
 195 200 205
 Pro Ala Ala Val Gly Arg Arg Ser Pro Val Ser Thr Arg Pro Leu Pro
 210 215 220
 Ser Ala Ser Gln Lys Ala Gly Glu Asn Gln Glu His Arg Gln Ala Glu

6069-74A.SEQ.txt

225 230 235 240
 Val His Lys Val Ser Arg Pro Glu Asn Glu Gln Leu Arg Asn Asp Asn
 245 250 255
 Lys Arg Gln Val Ala Pro Gly Ala Pro Ser Ala Pro Arg Arg Gly Arg
 260 265 270
 Gly Gly His Arg Gly Gly Arg Gly Arg Phe Gly Ile Arg Arg Asp Gly
 275 280 285
 Pro Met Lys Phe Glu Lys Asp Phe Asp Phe Glu Ser Ala Asn Ala Gln
 290 295 300
 Phe Asn Lys Glu Glu Ile Asp Arg Glu Phe His Asn Lys Leu Lys Leu
 305 310 315 320
 Lys Glu Asp Lys Leu Glu Lys Gln Glu Lys Pro Val Asn Gly Glu Asp
 325 330 335
 Lys Gly Asp Ser Gly Val Asp Thr Gln Asn Ser Glu Gly Asn Ala Asp
 340 345 350
 Glu Glu Asp Pro Leu Gly Pro Asn Cys Tyr Tyr Asp Lys Thr Lys Ser
 355 360 365
 Phe Phe Asp Asn Ile Ser Cys Asp Asp Asn Arg Glu Arg Arg Pro Thr
 370 375 380
 Trp Ala Glu Glu Arg Arg Leu Asn Ala Glu Thr Phe Gly Ile Pro Leu
 385 390 395 400
 Arg Pro Asn Arg Gly Arg Gly Gly Tyr Arg Gly Arg Gly Gly Leu Gly
 405 410 415
 Phe Arg Gly Gly Arg Gly Arg Gly Gly Gly Arg Gly Gly Thr Phe Thr
 420 425 430
 Ala Pro Arg Gly Phe Arg Gly Gly Phe Arg Gly Gly Arg Gly Gly Arg
 435 440 445
 Glu Phe Ala Asp Phe Glu Tyr Arg Lys Thr Thr Ala Phe Gly Pro
 450 455 460

<210> 17

<211> 2760

<212> DNA

<213> Homo sapiens

<400> 17

```

tgaagatgcc tcctctgatg cctactgctt tgagctgctc tctatggttt tagcactgag 60
tggctctaac gttggccggc aatatctggc tcaacagcta accctgcttc aggatctctt 120
ctcgctgctt cacacagcct ctccatagagt ccagagacag gtaacctctt tactaagaag 180
agttttgcct gaagtaaccc ctatgcgtct ggccagcatc ataggagtga aatccctccc 240
cccagcagat atcagtataa tcattcactc aacagagaaa ggagactgga ataagctggg 300
tatcttggac atgtttctag gatgcattgc caaagcactc actgtacagc taaaagccaa 360
aggaaccacc atcactggaa cagctgggtac cactgtgggc aaaggagtta caacagttac 420
tcttccgatg attttcaatt ccagttatct ccgacgaggt gaaagtcatt ggtggatgaa 480
gggctcaacc cctacccaga tctcagagat catcattaaa cttatcaagg atatggcagc 540
aggtcatctg tcagaagctt ggtcccagat gacaaaaaat gctattgcag aaaccatcat 600
tgccttgacc aagatggaag aagaatttag gtctccagtg agatgtattg caacaactag 660
actctggctt gctctcgcat ccctatgtgt tcttgatcag gaccacgtag atcgtctctc 720

```

6069-74A.SEQ.txt

```

ctcgggggaga tggatgggaa aggatggaca acaaaaaaca atgcctatgt gtgataacca 780
tgatgatggt gaaactgcag caatcatttt atgcaatgtc tgtggaaatt tatgtacaga 840
ctgtgacaga ttccttcacc ttcattcgaag aacaaaaact catcaaagac aggtcttcaa 900
agaagaagaa gaagctataa aggttgacct tcatgaaggt tgtggtagaa ccaaattggt 960
ctggttgatg gcactggcag attctaaaac aatgaaggca atggtggaat tccgagaaca 1020
cacaggcaaa cccaccacga gtagctcaga agcatgtcgc ttctgtggtt ccaggagtgg 1080
aacagagtta tctgtctgtg gcagtgtttg ttctgatgca gattgccagg aatacgctaa 1140
gatagcctgt agtaagacgc atccttgttg ccattccatgc ggggggtgta aaaacgaaga 1200
gcactgtctg ccctgtctac acggctgtga caaaagtgcc acaagcctga agcaagacgc 1260
cgatgacatg tgcattgatg gtttcaccga agcgctctcg gcagcaccag ccattcagct 1320
ggattgtagt cacatattcc acttacagtg ctgtcggcga gtattagaaa atcgatggct 1380
tggcccaagg ataacatttg gatttatatc ttgtcccat tgcagaaca aaattaatca 1440
catagtacta aaagacctac ttgatccaat aaaagaactc tatgaggatg tcagaagaaa 1500
agccttaatg agattggaat atgaaggctt gcataagagt gaagctatca caactcctgg 1560
tgtgaggttt tataatgacc cagctggcta tgcaatgaat agatatgcat attatgtgtg 1620
ctacaaatgc agaaaggcat attttggttg tgaagctcgc tgcgatgctg aggtctggacg 1680
gggagatgat tatgatccca gagagctcat ttgtggtgcc tgttctgatg tttccagggc 1740
tcagatgtgt cccaaacatg gcacagactt tttggaatat aaatgtcgtt actgctgttc 1800
agtggctgtt ttttctgtt ttggaacaac acatttttgt aatgcttgtc atgatgattt 1860
tcaaagaatg actagcattc ctaaggaaaga actaccacac tgtcctgcag gtcccaaagg 1920
caagcagtta gaaggaactg aatgtccact ccatgttggt catccacca ctggggaaga 1980
gtttgctctg ggaatgtggag tgtgcagaaa tgcccacact ttttagaaca cgcagatcct 2040
ttgtctacag agagaaaaat tgccttcatt cccaagagg atgcggtgaa gtttaaaactc 2100
tgctcaggat aaggacggga ccatttttac atccatgaaa atgaaccatt cacagtgcaa 2160
gaagataacc aaataccatg tacataattc ttgctatgaa aagtttccc attattttgg 2220
tttatcttct tttgaacaaa tgacatcaaa cttgtgaggt gtttgcatgt ggccattacc 2280
gtcattggcc tgtgaagcat tggacattta tagataattg atataaaaga atcgccatgc 2340
ccatggacta agaacgatgc tggctttcaa gcaaaaaaga aaaataatca ttgtttattg 2400
tatactgcct ttttgtaatc ctgtacaatt gcatcacggg tggggataaa aagaggaata 2460
ttctggttta tttcctagac tgttatttaa aaaaaaaaaa acattgtgtt aggacagcat 2520
ataaatgtaa taagtatcac actgtatata aacatatcaa tgtttgtcct gtataagaat 2580
tactaaatta caaatggaat ttcattttaa cttctagggt aagtttgagc ctgaaatatt 2640
aatgaagtgc aatactgagt gtgcctcatt atcttgagc tgtaaacata ttggaatgta 2700
catgtcaata aaaccactgt acatttttat acagtgataa agtctaaaaa aaaaaaaaaa 2760

```

<210> 18

<211> 660

<212> PRT

<213> Homo sapiens

<400> 18

Met Val Leu Ala Leu Ser Gly Ser Asn Val Gly Arg Gln Tyr Leu Ala
1 5 10 15

Gln Gln Leu Thr Leu Leu Gln Asp Leu Phe Ser Leu Leu His Thr Ala
20 25 30

Ser Pro Arg Val Gln Arg Gln Val Thr Ser Leu Leu Arg Arg Val Leu
35 40 45

Pro Glu Val Thr Pro Ser Arg Leu Ala Ser Ile Ile Gly Val Lys Ser
50 55 60

Leu Pro Pro Ala Asp Ile Ser Asp Ile Ile His Ser Thr Glu Lys Gly
65 70 75 80

Asp Trp Asn Lys Leu Gly Ile Leu Asp Met Phe Leu Gly Cys Ile Ala
85 90 95

Lys Ala Leu Thr Val Gln Leu Lys Ala Lys Gly Thr Thr Ile Thr Gly
100 105 110

Thr Ala Gly Thr Thr Val Gly Lys Gly Val Thr Thr Val Thr Leu Pro

6069-74A.SEQ.txt

```

115              120              125
Met Ile Phe Asn Ser Ser Tyr Leu Arg Arg Gly Glu Ser His Trp Trp
 130              135              140
Met Lys Gly Ser Thr Pro Thr Gln Ile Ser Glu Ile Ile Ile Lys Leu
 145              150              155              160
Ile Lys Asp Met Ala Ala Gly His Leu Ser Glu Ala Trp Ser Arg Val
              165              170              175
Thr Lys Asn Ala Ile Ala Glu Thr Ile Ile Ala Leu Thr Lys Met Glu
              180              185              190
Glu Glu Phe Arg Ser Pro Val Arg Cys Ile Ala Thr Thr Arg Leu Trp
              195              200              205
Leu Ala Leu Ala Ser Leu Cys Val Leu Asp Gln Asp His Val Asp Arg
 210              215              220
Leu Ser Ser Gly Arg Trp Met Gly Lys Asp Gly Gln Gln Lys Gln Met
 225              230              235              240
Pro Met Cys Asp Asn His Asp Asp Gly Glu Thr Ala Ala Ile Ile Leu
              245              250              255
Cys Asn Val Cys Gly Asn Leu Cys Thr Asp Cys Asp Arg Phe Leu His
              260              265              270
Leu His Arg Arg Thr Lys Thr His Gln Arg Gln Val Phe Lys Glu Glu
              275              280              285
Glu Glu Ala Ile Lys Val Asp Leu His Glu Gly Cys Gly Arg Thr Lys
 290              295              300
Leu Phe Trp Leu Met Ala Leu Ala Asp Ser Lys Thr Met Lys Ala Met
 305              310              315              320
Val Glu Phe Arg Glu His Thr Gly Lys Pro Thr Thr Ser Ser Ser Glu
              325              330              335
Ala Cys Arg Phe Cys Gly Ser Arg Ser Gly Thr Glu Leu Ser Ala Val
              340              345              350
Gly Ser Val Cys Ser Asp Ala Asp Cys Gln Glu Tyr Ala Lys Ile Ala
 355              360              365
Cys Ser Lys Thr His Pro Cys Gly His Pro Cys Gly Gly Val Lys Asn
 370              375              380
Glu Glu His Cys Leu Pro Cys Leu His Gly Cys Asp Lys Ser Ala Thr
 385              390              395              400
Ser Leu Lys Gln Asp Ala Asp Asp Met Cys Met Ile Cys Phe Thr Glu
              405              410              415
Ala Leu Ser Ala Ala Pro Ala Ile Gln Leu Asp Cys Ser His Ile Phe
 420              425              430
His Leu Gln Cys Cys Arg Arg Val Leu Glu Asn Arg Trp Leu Gly Pro
 435              440              445
Arg Ile Thr Phe Gly Phe Ile Ser Cys Pro Ile Cys Lys Asn Lys Ile

```


6069-74A.SEQ.txt

450 455 460
 Asn His Ile Val Leu Lys Asp Leu Leu Asp Pro Ile Lys Glu Leu Tyr
 465 470 475 480
 Glu Asp Val Arg Arg Lys Ala Leu Met Arg Leu Glu Tyr Glu Gly Leu
 485 490 495
 His Lys Ser Glu Ala Ile Thr Thr Pro Gly Val Arg Phe Tyr Asn Asp
 500 505 510
 Pro Ala Gly Tyr Ala Met Asn Arg Tyr Ala Tyr Tyr Val Cys Tyr Lys
 515 520 525
 Cys Arg Lys Ala Tyr Phe Gly Gly Glu Ala Arg Cys Asp Ala Glu Ala
 530 535 540
 Gly Arg Gly Asp Asp Tyr Asp Pro Arg Glu Leu Ile Cys Gly Ala Cys
 545 550 555 560
 Ser Asp Val Ser Arg Ala Gln Met Cys Pro Lys His Gly Thr Asp Phe
 565 570 575
 Leu Glu Tyr Lys Cys Arg Tyr Cys Cys Ser Val Ala Val Phe Phe Cys
 580 585 590
 Phe Gly Thr Thr His Phe Cys Asn Ala Cys His Asp Asp Phe Gln Arg
 595 600 605
 Met Thr Ser Ile Pro Lys Glu Glu Leu Pro His Cys Pro Ala Gly Pro
 610 615 620
 Lys Gly Lys Gln Leu Glu Gly Thr Glu Cys Pro Leu His Val Val His
 625 630 635 640
 Pro Pro Thr Gly Glu Glu Phe Ala Leu Gly Cys Gly Val Cys Arg Asn
 645 650 655
 Ala His Thr Phe
 660

<210> 19
 <211> 1649
 <212> DNA
 <213> Homo sapiens

<400> 19
 gattgtacat agtcttgtgg ggcattggggg agccggctgg aggtgagaac cctccccctct 60
 cccccaccc cccgggggaga gcaaatgtaa aactactaat ttttgtgctt tatatatattct 120
 atataaatat atctattttt tttttacaaa accagtttat aaatggtagg ggggtgtggg 180
 gcggacacat ggagctcccc ttgtgggggg gccccctcca ttaccggacc taccgcccct 240
 ttcctcacc cccaccccac tccccacccc ctggctgtga ctgctgtaag atgggggtat 300
 agaggctggg caattcccac cccctgttgt atagtggac tatgttataa cgcacaaaag 360
 agagctgacc ccagggggag ccagagggtg atgggttcct tgcctcccct tccttcccct 420
 ttttgcccaa gcttgtgctg cagttgaacc tcttctggg ggtgggagta ggtaaggggt 480
 ggggtaggcc ccaaaccct ctctggtagg gaaccgtgg gatgaagatg aagcttatat 540
 gcagttctct tctaggggct gtgggcaaag ggcattttgt aattaatatt ttcaagaatc 600
 agatgtctgg agtgtagggg tgggcttggg ggtggtggac gggcgggcct gctggagggg 660
 gagcttggtc gctgttgtag ttttaggttt gtttttggtt tgttttgaat ttgggggggt 720
 gtggattgtt gggggtaggg agattttttt ttttttaaag ctgcttcctc aactgtttca 780
 agctgcaaat gtttaagaga ataacagccc ccactccac aggaaccgct gtaattaaat 840
 cagacagtag gaagactggg ctgctgccct caaagccaca gcccttgat gttccttttc 900

6069-74A.SEQ.txt

```

cgagagcaga aggtctaggg tacagggagg gggagattgg ctcccgtgag tcaggctgtg 960
tttggggcctt gggccctggg attgggaaaa ggggatgggg cagactttgt aagcatatgc 1020
taggtatccg atagtcctgt agaatttagt gaagaaacct tatacagttt ttaattttta 1080
tataaactat aactcagacc caagctacaa ggttggaatt ttggttggtt ttttttttaa 1140
gtaccctgcc tgtataattg catcagaatc cccaccccca ccccsgcc csgtgttgt 1200
attttgggtt ggtttacact cgcacatact cagttttcag ttttccctt tacagtcttc 1260
tcccctcacc tccaggaccc tccccctttt taaaaaataa atcgctgaca agtgtgaatc 1320
ccgtgaagac tttattttgt gttgtgtgta tcctgtacag caaggttggt ccttcgtaac 1380
aacggatgaa atggttcctt tttttaaaag gccctctctc cctccaccct cagcgccct 1440
gtccttgga tgttttgtat cagcgatcat tctgaactgt acatatttat gttgcgagag 1500
gcaaagggca agttttggat tttgcttctt ccaagtttgt ttttaaacga caaataaaaa 1560
aagaacattt taaataaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa 1620
aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa 1649

```

<210> 20
 <211> 92
 <212> PRT
 <213> Homo sapiens

<400> 20
 Met Gly Glu Pro Ala Gly Gly Glu Asn Pro Pro Leu Ser Pro His Pro
 1 5 10 15
 Pro Gly Arg Ala Asn Val Lys Leu Leu Ile Phe Val Leu Tyr Ile Phe
 20 25 30
 Tyr Ile Asn Ile Ser Ile Phe Phe Leu Gln Asn Gln Phe Ile Asn Gly
 35 40 45
 Arg Gly Val Trp Gly Gly His Met Glu Leu Pro Leu Trp Gly Gly Pro
 50 55 60
 Leu His Tyr Pro Thr Tyr Arg Pro Phe Pro His Pro Pro Pro His Ser
 65 70 75 80
 Pro Pro Pro Gly Cys Asp Cys Cys Lys Met Gly Val
 85 90

<210> 21
 <211> 2644
 <212> DNA
 <213> Homo sapiens

<400> 21
 gttgaggatg gctgacattc tctctcagtc agagaccctg gcgtcgcaag acctcagtgg 60
 ggacttcaag aagccagctc tgccggtgtc cccagcggcg cggagtaagg ccccggccag 120
 cagttcttca aaccctgagg aggtacagaa ggaagggccc actgcgttgc aggactccaa 180
 ttctggggag cccgacatcc ctctcctca gccggactgc ggtgatttta ggagtctaca 240
 ggaggagcag tcgcgcccc aacagcgggt ttcttcccct ggcggtccag cccgggctcc 300
 cccctaccaaa gagcctccat ggggtggccc tgccacagcc ccctacagct tagagaccct 360
 gaagggcggc actatccttg gcacccgtag cttgaaaggg acgagttact gccttttcgg 420
 gaggctgtct ggctgcgacg tgtgcctgga gcacccctcg gtgtctcgg accacgcagt 480
 gctgcagcac agggcgctcc gcccgtgacg agaatgcgac agcaacgggc cgggcttcta 540
 cctctacgat ctgggaagca cccatggcac ttttctcaac aaaactcgca tcccacctcg 600
 cacctactgt cgagtccacg ttgggcattg ttttgccttt ggaggcagca cccggctctt 660
 tatcctgcag ggaccagagg aagaccgaga ggcagaatcc gagttaacag taacacagtt 720
 gaaggaattg cgcaagcagc agcaaattat gttggrgaag aagatgctag gagaagactc 780
 agatgaagaa gaggaattgg atacctctga aaggaagata aatgctggta gccaatgata 840
 tgagatgggt tgcacctggg gaatgggaga agatgcagta gaggatgatg ctgaagagaa 900
 ccctattgtc ttagagtttc agcaggaaag ggaggccttt tatataaagg atcccaaaaa 960
 ggctctccaa ggcttttttg accgagaagg agaagaatta gaatatgaat ttgatgaaca 1020
 gggacatagc acttggctct gcaggggtgag attacctgtg gacgattcaa ctggaaaaca 1080

6069-74A.SEQ.txt

```

actggtggct gaggccattc actcaggaaa gaaaaaagaa gcaatgatcc agtgctcatt 1140
ggaagcttgt cggattcttg acactttggg attgcttcgg caggaagcag tatctcggaa 1200
aaggaaagcc aagaactggg aagatgaaga cttttatgat agtgatgatg acacatttct 1260
tgataggact ggcctgattg agaagaagcg tctgaacaga atgaagaagg ctggcaagat 1320
tgatgagaag ccagagacct ttgaatcatt gggtgcaaaa ttaaattgatg ctgaaagggg 1380
actttctgaa atttctgaga gattgaaagc ctcaagccaa gttctatcag agtctccatc 1440
tcaggattct ttagatgcgt tcatgtcaga aatgaaatca ggcagtacat tagatgggtg 1500
gtcccgggaag aaacttcacc tgagaacttt tgaactgagg aaagaacaac agagacttaa 1560
aggggttaata aaaattgtaa agccagcaga gattccagaa ctaaaaaaga ctgaaactca 1620
gactacaggt gcagaaaaca aagctaaaaa gcttacattg cctctatttg gtgccatgaa 1680
aggaggaagc aaattcaaat taaaaactgg aacagtaggg aagttacccc ccaagcgtcc 1740
agaactccct ccaactctaa tgagaatgaa agatgagcct gaagtagaag aggaggagga 1800
agaggaagag gaagaagaga aagaaaagga ggagcatgaa aagaaaaaac tggaggatgg 1860
aagcctcagt aggccacagc cagagataga gccagaagca gcagtgcagg aaatgaggcc 1920
tcccacagat ctcacacatt ttaaagaaac ccaaaccat ggtaatatct ttcttctcct 1980
tcctgtgttg ttcagtgggc agttacattg attgtggata ggttttaaaa agcaaggcca 2040
gttcttgtct gtgcatttga ctttgtatgt gatatactga ctctgtagca aggaaacata 2100
ctttcttggg cttcttcctt tgaccgccag tcattatttg tcttcattgc aaattaaggg 2160
cagttatttc caatccattc cagaattaca gaaaattgaa gggctatgga atctgaaacc 2220
atagctgctg tggaataatc ctgagctgct gccactgtgt gagttggagg gcagtgggaa 2280
agggtacatg atggggcctg atcaggtggg ctccggataa gtcaaccctt attcattttt 2340
tcctccatcc ctaaaacaga ggccaaacca taattgtact cattggacta aagttctcaa 2400
gaaggatctt gcttcattca tttttgtgtg tttggaacct agcacaacac ctgacacata 2460
tccacccgcc tcagcaaata tttgatgaaa aatgttgaaa gacggaatag attgatattc 2520
atatagatat atgcatcaat taattctgta ttttctatat atatattcta attacaaagg 2580
gttatatggt catttttagaa actatagatc atacataaaa gtccaaagga aaaaaaaaaa 2644
aaaa

```

<210> 22
 <211> 667
 <212> PRT
 <213> Homo sapiens

<220>
 <221> UNSURE
 <222> (250)

<400> 22
 Met Ala Asp Ile Leu Ser Gln Ser Glu Thr Leu Ala Ser Gln Asp Leu
 1 5 10 15
 Ser Gly Asp Phe Lys Lys Pro Ala Leu Pro Val Ser Pro Ala Ala Arg
 20 25 30
 Ser Lys Ala Pro Ala Ser Ser Ser Ser Asn Pro Glu Glu Val Gln Lys
 35 40 45
 Glu Gly Pro Thr Ala Leu Gln Asp Ser Asn Ser Gly Glu Pro Asp Ile
 50 55 60
 Pro Pro Pro Gln Pro Asp Cys Gly Asp Phe Arg Ser Leu Gln Glu Glu
 65 70 75 80
 Gln Ser Arg Pro Thr Thr Ala Val Ser Ser Pro Gly Gly Pro Ala Arg
 85 90 95
 Ala Pro Pro Tyr Gln Glu Pro Pro Trp Gly Gly Pro Ala Thr Ala Pro
 100 105 110
 Tyr Ser Leu Glu Thr Leu Lys Gly Gly Thr Ile Leu Gly Thr Arg Ser
 115 120 125
 Leu Lys Gly Thr Ser Tyr Cys Leu Phe Gly Arg Leu Ser Gly Cys Asp
 Page 19

6069-74A.SEQ.txt
140

130

135

Val Cys Leu Glu His Pro Ser Val Ser Arg Tyr His Ala Val Leu Gln
145 150 155 160
His Arg Ala Ser Gly Pro Asp Gly Glu Cys Asp Ser Asn Gly Pro Gly
165 170 175
Phe Tyr Leu Tyr Asp Leu Gly Ser Thr His Gly Thr Phe Leu Asn Lys
180 185 190
Thr Arg Ile Pro Pro Arg Thr Tyr Cys Arg Val His Val Gly His Val
195 200 205
Val Arg Phe Gly Gly Ser Thr Arg Leu Phe Ile Leu Gln Gly Pro Glu
210 215 220
Glu Asp Arg Glu Ala Glu Ser Glu Leu Thr Val Thr Gln Leu Lys Glu
225 230 235 240
Leu Arg Lys Gln Gln Gln Ile Leu Leu Xaa Lys Lys Met Leu Gly Glu
245 250 255
Asp Ser Asp Glu Glu Glu Glu Met Asp Thr Ser Glu Arg Lys Ile Asn
260 265 270
Ala Gly Ser Gln Asp Asp Glu Met Gly Cys Thr Trp Gly Met Gly Glu
275 280 285
Asp Ala Val Glu Asp Asp Ala Glu Glu Asn Pro Ile Val Leu Glu Phe
290 295 300
Gln Gln Glu Arg Glu Ala Phe Tyr Ile Lys Asp Pro Lys Lys Ala Leu
305 310 315 320
Gln Gly Phe Phe Asp Arg Glu Gly Glu Glu Leu Glu Tyr Glu Phe Asp
325 330 335
Glu Gln Gly His Ser Thr Trp Leu Cys Arg Val Arg Leu Pro Val Asp
340 345 350
Asp Ser Thr Gly Lys Gln Leu Val Ala Glu Ala Ile His Ser Gly Lys
355 360 365
Lys Lys Glu Ala Met Ile Gln Cys Ser Leu Glu Ala Cys Arg Ile Leu
370 375 380
Asp Thr Leu Gly Leu Leu Arg Gln Glu Ala Val Ser Arg Lys Arg Lys
385 390 395 400
Ala Lys Asn Trp Glu Asp Glu Asp Phe Tyr Asp Ser Asp Asp Asp Thr
405 410 415
Phe Leu Asp Arg Thr Gly Leu Ile Glu Lys Lys Arg Leu Asn Arg Met
420 425 430
Lys Lys Ala Gly Lys Ile Asp Glu Lys Pro Glu Thr Phe Glu Ser Leu
435 440 445
Val Ala Lys Leu Asn Asp Ala Glu Arg Glu Leu Ser Glu Ile Ser Glu
450 455 460
Arg Leu Lys Ala Ser Ser Gln Val Leu Ser Glu Ser Pro Ser Gln Asp

6069-74A.SEQ.txt

465 470 475 480
 Ser Leu Asp Ala Phe Met Ser Glu Met Lys Ser Gly Ser Thr Leu Asp
 485 490 495
 Gly Val Ser Arg Lys Lys Leu His Leu Arg Thr Phe Glu Leu Arg Lys
 500 505 510
 Glu Gln Gln Arg Leu Lys Gly Leu Ile Lys Ile Val Lys Pro Ala Glu
 515 520 525
 Ile Pro Glu Leu Lys Lys Thr Glu Thr Gln Thr Thr Gly Ala Glu Asn
 530 535 540
 Lys Ala Lys Lys Leu Thr Leu Pro Leu Phe Gly Ala Met Lys Gly Gly
 545 550 555 560
 Ser Lys Phe Lys Leu Lys Thr Gly Thr Val Gly Lys Leu Pro Pro Lys
 565 570 575
 Arg Pro Glu Leu Pro Pro Thr Leu Met Arg Met Lys Asp Glu Pro Glu
 580 585 590
 Val Glu Glu Glu Glu Glu Glu Glu Glu Glu Glu Lys Glu Lys Glu
 595 600 605
 Glu His Glu Lys Lys Lys Leu Glu Asp Gly Ser Leu Ser Arg Pro Gln
 610 615 620
 Pro Glu Ile Glu Pro Glu Ala Ala Val Gln Glu Met Arg Pro Pro Thr
 625 630 635 640
 Asp Leu Thr His Phe Lys Glu Thr Gln Thr His Gly Asn Ile Phe Leu
 645 650 655
 Leu Leu Pro Val Leu Phe Ser Gly Gln Leu His
 660 665

<210> 23

<211> 2402

<212> DNA

<213> Homo sapiens

<400> 23

gatcgagag accaaggagg cgcccgcggc tgcagagctg cagagcgagg tctcttcgag 60
 ctgtctgtgt ccgggagagg ggcgcgcaac tgagccagag gacagcgcat cctttcggcg 120
 cgggccggca gggcccttgc ggtcggcaag ctggctcccc ggggtggccac cgggaccccc 180
 gagcccaatg gcgggggagg cggcaaaatc cacaacactg tagagatcac cccacacctc 240
 aacggacagg tcgggaccct cggagatgag gtgcccacgg agcagctgca ggggtgagcgg 300
 gagcgcgagc gggaggggga gggagacgag ggcggcgagc gactgggagc cagcctgtcg 360
 ctggccgtgc cccagggccc cctcagcttt gaggcgctgc tcgcccagggt gggggcgctg 420
 ggcggcgagg agcagctgca gctcggcctc tgctgcctgc cgggtgctctt cgtggctctg 480
 ggcatggcct cggaccccat cttcacgctg gcgccccgc tgcatggcca ctacggggcc 540
 ttcccccta atgcctctgg ctgggagcag cctcccaatg ccagcggcgt cagcgtcgcc 600
 agcgtgcccc tagcagccag cgccgcccag cgtgtcgcca ccagtaccga cccctcgtgc 660
 agcggcttcg ccccgccgga cttcaaccat tgcctcaagg attgggacta taatggcctt 720
 cctgtgtcga ccaccaacgc catcgccag tgggatctgg tgtgtgacct gggctggcag 780
 gtgatcctgg agcagatcct cttcatcttg ggccttgccct ccggctacct gttcctgggt 840
 taccggcag acagatttgg ccgtcggagg attgtgctgc tgacctggg gctgggtggg 900
 ccctgtggag taggagggg tgctgcaggc tcctccacag gcgtcatggc cctccgattc 960
 ctcttgggct ttctgcttgc cgggtgtgac ctgggtgtct acctgatgag cctggagctg 1020
 tgcgacccaa cccagaggct tcgggtggcc ctggcagggg agttgggtgg ggtgggaggg 1080

6069-74A.SEQ.txt

```

cacttcctgt tcctgggcct ggccttctgc tctaaggatt ggcgattcct acagcgaatg 1140
atcaccgctc cctgcatcct ctctctgttt tatggctggc ctggtttgtt cctggagtcc 1200
gcacggtggc tgatagtga ggcgcagatt gaggaggctc agtctgtgct gaggatcctg 1260
gctgagcgaa accggcccca tgggcagatg ctgggggagg aggccagga ggcctgcag 1320
gacctggaga atacctgcc tctccctgca acatcctcct tttcctttgc ttccctcctc 1380
aactaccgca acatctggaa aaatctgctt atcctgggct tcaccaactt cattgccccat 1440
gccattcgcc actgctacca gcctgtggga ggaggaggga gccatcgga cttctacctg 1500
tgctctctgc tggccagcgg caccgcagcc ctggcctgtg tcttcctggg ggtcaccgtg 1560
gaccgatttg gccgcgggg catccttctt ctctccatga cccttaccgg cattgcttcc 1620
ctggtcctgc tgggcctgtg ggattatctg aacgaggctg ccatcaccac tttctctgtc 1680
cttgggctct tctcctccca agctgccgcc atcctcagca cctccttgc tgctgagggtc 1740
atccccacca ctgtccgggg ccgtggcctg ggcctgatca tggctctagg ggcgttggga 1800
ggactgagcg gcccggccca gcgcctccac atgggccatg gagccttcct gcagcacgtg 1860
tgctggcgcc cctgcgccct cctctgcatt ctgagcatta tgctgctgcc ggagaccaag 1920
cgcaagctcc tgcccagagt gctccgggac ggggagctgt gtcgcccggc ttccctgctg 1980
cggcagccac cccctaccgg ctgtgaccac gtcccgtgc ttgccacccc caaccctgcc 2040
ctctgagcgg cctctgagta ccctggcggg aggtggccc acacagaaag gtggcaagaa 2100
gatcgggaag actgagtagg gaaggcaggg ctgcccagaa gtctcagagg cacctcacgc 2160
cagccatcgc ggagagctca gagggccgtc cccaccctgc ctctcctctg ctgctttgca 2220
ttcacttcct tggccagagt caggggacag ggagagagct ccacactgta accactgggt 2280
ctgggctcca tcctgcgccc aaagacatcc acccagacct cattatttct tgctctatca 2340
ttctgtttca ataaagacat ttggaataaa cgaaaaaaaa aaaaaaaaaa aaaaaaaaaa 2400
aa

```

<210> 24
 <211> 520
 <212> PRT
 <213> Homo sapiens

<400> 24
 Met Ala Ser Asp Pro Ile Phe Thr Leu Ala Pro Pro Leu His Cys His
 1 5 10 15
 Tyr Gly Ala Phe Pro Pro Asn Ala Ser Gly Trp Glu Gln Pro Pro Asn
 20 25 30
 Ala Ser Gly Val Ser Val Ala Ser Ala Ala Leu Ala Ala Ser Ala Ala
 35 40 45
 Ser Arg Val Ala Thr Ser Thr Asp Pro Ser Cys Ser Gly Phe Ala Pro
 50 55 60
 Pro Asp Phe Asn His Cys Leu Lys Asp Trp Asp Tyr Asn Gly Leu Pro
 65 70 75 80
 Val Leu Thr Thr Asn Ala Ile Gly Gln Trp Asp Leu Val Cys Asp Leu
 85 90 95
 Gly Trp Gln Val Ile Leu Glu Gln Ile Leu Phe Ile Leu Gly Phe Ala
 100 105 110
 Ser Gly Tyr Leu Phe Leu Gly Tyr Pro Ala Asp Arg Phe Gly Arg Arg
 115 120 125
 Gly Ile Val Leu Leu Thr Leu Gly Leu Val Gly Pro Cys Gly Val Gly
 130 135 140
 Gly Ala Ala Ala Gly Ser Ser Thr Gly Val Met Ala Leu Arg Phe Leu
 145 150 155 160
 Leu Gly Phe Leu Leu Ala Gly Val Asp Leu Gly Val Tyr Leu Met Arg
 165 170 175

6069-74A.SEQ.txt

Leu Glu Leu Cys Asp Pro Thr Gln Arg Leu Arg Val Ala Leu Ala Gly
 180 185 190
 Glu Leu Val Gly Val Gly Gly His Phe Leu Phe Leu Gly Leu Ala Leu
 195 200 205
 Val Ser Lys Asp Trp Arg Phe Leu Gln Arg Met Ile Thr Ala Pro Cys
 210 215 220
 Ile Leu Phe Leu Phe Tyr Gly Trp Pro Gly Leu Phe Leu Glu Ser Ala
 225 230 235 240
 Arg Trp Leu Ile Val Lys Arg Gln Ile Glu Glu Ala Gln Ser Val Leu
 245 250 255
 Arg Ile Leu Ala Glu Arg Asn Arg Pro His Gly Gln Met Leu Gly Glu
 260 265 270
 Glu Ala Gln Glu Ala Leu Gln Asp Leu Glu Asn Thr Cys Pro Leu Pro
 275 280 285
 Ala Thr Ser Ser Phe Ser Phe Ala Ser Leu Leu Asn Tyr Arg Asn Ile
 290 295 300
 Trp Lys Asn Leu Leu Ile Leu Gly Phe Thr Asn Phe Ile Ala His Ala
 305 310 315 320
 Ile Arg His Cys Tyr Gln Pro Val Gly Gly Gly Gly Ser Pro Ser Asp
 325 330 335
 Phe Tyr Leu Cys Ser Leu Leu Ala Ser Gly Thr Ala Ala Leu Ala Cys
 340 345 350
 Val Phe Leu Gly Val Thr Val Asp Arg Phe Gly Arg Arg Gly Ile Leu
 355 360 365
 Leu Leu Ser Met Thr Leu Thr Gly Ile Ala Ser Leu Val Leu Leu Gly
 370 375 380
 Leu Trp Asp Tyr Leu Asn Glu Ala Ala Ile Thr Thr Phe Ser Val Leu
 385 390 395 400
 Gly Leu Phe Ser Ser Gln Ala Ala Ala Ile Leu Ser Thr Leu Leu Ala
 405 410 415
 Ala Glu Val Ile Pro Thr Thr Val Arg Gly Arg Gly Leu Gly Leu Ile
 420 425 430
 Met Ala Leu Gly Ala Leu Gly Gly Leu Ser Gly Pro Ala Gln Arg Leu
 435 440 445
 His Met Gly His Gly Ala Phe Leu Gln His Val Val Leu Ala Ala Cys
 450 455 460
 Ala Leu Leu Cys Ile Leu Ser Ile Met Leu Leu Pro Glu Thr Lys Arg
 465 470 475 480
 Lys Leu Leu Pro Glu Val Leu Arg Asp Gly Glu Leu Cys Arg Arg Pro
 485 490 495
 Ser Leu Leu Arg Gln Pro Pro Pro Thr Arg Cys Asp His Val Pro Leu
 500 505 510

6069-74A.SEQ.txt

Leu Ala Thr Pro Asn Pro Ala Leu
515 520

<210> 25
<211> 2377
<212> DNA
<213> Homo sapiens

```
<400> 25
ttcattcttc agtggaaatc catcagttga aatagttcat ggtattatgc acctatataa 60
gacaaataag atgacctcct taaaagaaga tgtgcggcgc agtgccatgc tgtgtattct 120
cacagtcctt gctgcaatga ccagtcatga ccttatgaag tttgttgccc catttaacga 180
agtaattgaa caaatgaaaa ttatcagaga ctctactccc aaccaatata tgggtgctgat 240
aaagtttcgt gcacaggctg atgcggtatg tttttatatg acatgcaatg gccgccagtt 300
caactcaata gaagatgacg tttgccagct agtgtatgtg gaaagagctg aagtgtctca 360
atctgaagat ggcgccagcc tcccagtgat ggacctgact gaactcccca agtgcacggt 420
gtgtctggag cgcattggac agtctgtgaa tggcatcctc acaacgttat gtaaccacag 480
cttccacagc cagtgtctac agcgttgga cgataccacg tgtcctgttt gccggtactg 540
tcaaacgccc gagccagtag aagaaaaataa gtgttttgag tgtggtgttc aggaaaatct 600
ttggatttgt ttaatatgag gccacatagg atgtggacgg tatgtcagtc gacatgctta 660
taagcacttt gaggaacgc agcacacgta tgccatgcag cttaccaacc atcgagtctg 720
ggactatgct ggagataact atgttcacg actggttgca agtaaacag atggaaaaat 780
agtacagtat gaatgtgagg gggatacttg ccaggaagag aaaatagatg cttacagtt 840
agagtattca tatttactaa caagccagct ggaatctcag cgaatctact gggaaaaaca 900
gatagttcgg atagagaagg acacagcaga ggaaattaac aacatgaaga ccaagtttaa 960
agaaacaatt gagaagtgtg ataacttaga gcacaaacta aatgatctcc taaaagaaaa 1020
gcagtctgtg gaaagaaagt gcactcagct aaacacaaaa gtggccaaac tcaaatctca 1080
gagtgggtat cctagcatct agcaagactg agtggggaga tttctcatcc gtgtgaaaaat 1140
gtagagttag gcctctgact agctaattgt gtattttgtt gggtttagta ttttctaaat 1200
gtttacaaaa tattgggctg catgttcagg ttgcagctag agggagcttg ggcagatttt 1260
caattacgct ttcaagatat aacaaaagc tgtttctaaa tcctaaaatt agaatttcaa 1320
cagagccccc tttagaacag tcatataacg cttgtgtggg ccaacagagg ggctgtgtac 1380
tctctctgga accataaatg tcaaataatt tataacctgc agtaattgag caaacttaaa 1440
ataagacctg tgttgggaatt tagtttcttg aagaggtaga gggatagggt agtaagatgt 1500
attgttaaac aacaggtttt agtttttgct ttataattag ccacaggttt tcaaatgatc 1560
acatttcaga ataggttttt agcctgtaat taggcctcat cccctttgac ctaaatgtct 1620
gacatgttac ttgttagcac atcaactgta tcactaatca ccatctgttt ttgtgggatg 1680
tgctgcagca tttcccaaaa aactttacgt gtaatgttgc aaaatgaatg tactcagaca 1740
ttcttaattt ttacttaggg cagaccaact ctttgagtct ctcttggaat tatatatata 1800
gatattctaa gagtgggaat gtaaagcata acctaatctt ctttctata gagattctat 1860
tttattttaa atctattttt acactagtta gaatcctgct gttttggcca agtacttgtc 1920
ttgcatgtct gaccttgacg aagctggggt ggatcatagc atactaatga agagaattag 1980
aagtagttta caaagctcgc tcaactctca tttctctgtg atcccttcta tccagtggcc 2040
ccaccaccac ctgggaaaac agatttttca gtacagggtg gataaatgct ttgaaaggct 2100
gtgccagag caatgagcaa ataggcaagt gtttccaaac tamttggagg tttaaaaaaa 2160
atatgtccca gaaaaaaaaa aaatcttacc aagatacgta aagaaaaaaa aatttttttt 2220
taaacagtca aagagtcag tttgaatttc acaaaatcac atcagacaga agttgttttc 2280
ttcaggaggg aaatgaacca cttaatatat ccatactacc ttgaacaatg aaattgaatt 2340
aaaaatagcca aactttgaaa ttaaaaaaaa aaaaaaaa 2377
```

<210> 26
<211> 351
<212> PRT
<213> Homo sapiens

```
<400> 26
Met His Leu Tyr Lys Thr Asn Lys Met Thr Ser Leu Lys Glu Asp Val
  1          5          10          15
Arg Arg Ser Ala Met Leu Cys Ile Leu Thr Val Pro Ala Ala Met Thr
      20          25          30
```


6069-74A.SEQ.txt

Ser His Asp Leu Met Lys Phe Val Ala Pro Phe Asn Glu Val Ile Glu
 35 40 45
 Gln Met Lys Ile Ile Arg Asp Ser Thr Pro Asn Gln Tyr Met Val Leu
 50 55 60
 Ile Lys Phe Arg Ala Gln Ala Asp Ala Asp Ser Phe Tyr Met Thr Cys
 65 70 75 80
 Asn Gly Arg Gln Phe Asn Ser Ile Glu Asp Asp Val Cys Gln Leu Val
 85 90 95
 Tyr Val Glu Arg Ala Glu Val Leu Lys Ser Glu Asp Gly Ala Ser Leu
 100 105 110
 Pro Val Met Asp Leu Thr Glu Leu Pro Lys Cys Thr Val Cys Leu Glu
 115 120 125
 Arg Met Asp Glu Ser Val Asn Gly Ile Leu Thr Thr Leu Cys Asn His
 130 135 140
 Ser Phe His Ser Gln Cys Leu Gln Arg Trp Asp Asp Thr Thr Cys Pro
 145 150 155 160
 Val Cys Arg Tyr Cys Gln Thr Pro Glu Pro Val Glu Glu Asn Lys Cys
 165 170 175
 Phe Glu Cys Gly Val Gln Glu Asn Leu Trp Ile Cys Leu Ile Cys Gly
 180 185 190
 His Ile Gly Cys Gly Arg Tyr Val Ser Arg His Ala Tyr Lys His Phe
 195 200 205
 Glu Glu Thr Gln His Thr Tyr Ala Met Gln Leu Thr Asn His Arg Val
 210 215 220
 Trp Asp Tyr Ala Gly Asp Asn Tyr Val His Arg Leu Val Ala Ser Lys
 225 230 235 240
 Thr Asp Gly Lys Ile Val Gln Tyr Glu Cys Glu Gly Asp Thr Cys Gln
 245 250 255
 Glu Glu Lys Ile Asp Ala Leu Gln Leu Glu Tyr Ser Tyr Leu Leu Thr
 260 265 270
 Ser Gln Leu Glu Ser Gln Arg Ile Tyr Trp Glu Asn Lys Ile Val Arg
 275 280 285
 Ile Glu Lys Asp Thr Ala Glu Glu Ile Asn Asn Met Lys Thr Lys Phe
 290 295 300
 Lys Glu Thr Ile Glu Lys Cys Asp Asn Leu Glu His Lys Leu Asn Asp
 305 310 315 320
 Leu Leu Lys Glu Lys Gln Ser Val Glu Arg Lys Cys Thr Gln Leu Asn
 325 330 335
 Thr Lys Val Ala Lys Leu Lys Ser Gln Ser Gly Tyr Pro Ser Ile
 340 345 350

<210> 27
 <211> 460

6069-74A.SEQ.txt

<212> DNA
 <213> Homo sapiens

<400> 27
 cgagatgaag ccggcggtgg acgagatggt ccccgagggc gccggggccct acgtggacct 60
 ggacgagggc ggaggcagca ccggggtctt gatggacttg gcagccaatg aaaagccgtt 120
 catgcagact tttttaacga ttttgaagat ctttttgatg atgatgacat ccagtggatg 180
 gccctctggc tgcaggcggg gccaaagcct tgggtacagag ccgcagtgtg agcctgacga 240
 ggacagtttc aggtgggttt aaagaacacg tggaaatccc ttgaatttag gacctgggta 300
 accagaaaga taagactgtt cttaacgacc tagatgattc tgttcatttc tgaacgggat 360
 caggttttgt cctcactcca attaaaagaa agcaatgtca catgaaaaaa aaaaaaaaaa 420
 aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa 460

<210> 28
 <211> 85
 <212> PRT
 <213> Homo sapiens

<400> 28
 Met Lys Pro Ala Val Asp Glu Met Phe Pro Glu Gly Ala Gly Pro Tyr
 1 5 10 15
 Val Asp Leu Asp Glu Ala Gly Gly Ser Thr Gly Leu Leu Met Asp Leu
 20 25 30
 Ala Ala Asn Glu Lys Pro Phe Met Gln Thr Phe Leu Thr Ile Leu Lys
 35 40 45
 Ile Phe Leu Met Met Met Thr Ser Ser Glu Met Pro Ser Gly Cys Arg
 50 55 60
 Arg Gly Gln Ala Leu Gly Thr Glu Pro Gln Cys Glu Pro Ala Gln Asp
 65 70 75 80
 Ser Phe Arg Trp Phe
 85

<210> 29
 <211> 3204
 <212> DNA
 <213> Homo sapiens

<400> 29
 gtttggcatc tgtggccgag ttgctgttgc cgggtgatag ttggagcgga gacttagcac 60
 aatggcagaa cctgtttctc cactgaagca ctttgtgctg gctaagaagg cgattactgc 120
 aatccttgac cagttactgg agtttgttac tgaaggatca cttttgttg aagcaacata 180
 taagaatccg gaacttgatc gaatagccac tgaagatgat ctggtagaaa tgcaaggata 240
 taaagacaag ctttccatca ttggtgaggt gctatctcgg agacacatga aggtggcatt 300
 ttttggcagg acaagcagtg ggaagagctc tgttatcaat gcaatgttgt gggataaagt 360
 tctccctagt gggattggcc atataaccaa ttgcttccta agtgttgaag gaactgatgg 420
 agataaagcc tatcttatga cagaaggatc agatgaaaaa aagagtgtga agacagttaa 480
 tcaactggcc catgcccttc acatggacaa agatttgaaa gctggctgtc ttgtacgtgt 540
 gttttggcca aaagcaaaaat gtgccctctt gagagatgac ctggtgttag tagacagtcc 600
 aggcacagat gtcactacag agctggatag ctggattgat aagttttgcc tagatgctga 660
 tgtctttgtt ttggtcgcaa actctgaatc aacactaatg aatacggaaa aacacttttt 720
 tcacaagggtg aatgagcggc tttccaagcc taatattttc attctcaata atcgttggga 780
 tgcctctgca tcagagccag aatatatgga agacgtacgc agacagcaca tggaaagatg 840
 cctgcatttc ttggtggagg agctcaaagt tgtaaagtct ttagaagcac agaatcgtat 900
 cttctttgtt tcagcaaagg aagttcttag tgctagaaa caaaaagcac aggggatgcc 960
 agaaagtgtt ttggcacttg ctgaaggatt tcattgcaaga ttacagggaat ttcagaattt 1020
 tgaacaaatc tttgaggagt gtatctcgca gtcagcagtg aaaacaaagt tcgaacagca 1080
 cactatcaga gctaaacaga tactagctac tgtgaaaaac ataattggatt cagtaaacct 1140

6069-74A.SEQ.txt

```

ggcagctgaa gataaaaggc attatttcagt ggaagagagg gaagaccaa ttgatagact 1200
ggacttttatt cgaaaccaga tgaacctttt aacactggat gtttaagaaa aaatcaagga 1260
gggttaccgag gaggtggcaa acaaagtttc atgtgcaatg acagatgaaa tttgtcgact 1320
gtctgttttg gttgatgaat tttgttcaga gtttcacctt aatccagatg tattaaaaat 1380
atataaaagt gaattaaata agcacataga ggatgggatg ggaagaaatt tggctgactg 1440
atgcaccgat gaagtaaacg ccttagtgcc tcagaccag caagaaatta ttgaaaattt 1500
gaagccatta cttccagctg gtatacagga taaactacat acactgatcc cttgcaagaa 1560
atttgatctc agttataatc taaattacca caagttatgt tcagattttc aagaggatat 1620
tgtatttcgt ttttccctgg gctggctctt ccttgtaacat cgatttttgg gccctagaaa 1680
tgctcaaagg gtgctcctag gattatcaga gcctatcttt cagctcccta gatcttttagc 1740
ttctactccc actgctccta ccactccagc aacgccagat aatgcatcac aggaagaact 1800
catgattaca ttagtaacag gattggcgct cgttacatct agaacttcta tgggcatcat 1860
tattgttggg ggagtgattt ggaaaactat aggtctggaaa ctcttatctg tttcattaac 1920
tatgtatgga gctttgtatc tttatgaaag actgagctgg accacccatg ccaaggagcg 1980
agcctttaaa cagcagtttg taaactatgc aactgaaaaa ctgaggatga ttgttagctc 2040
cacgagtgc aactgcagtc accaagtaaa acaacaaata gctaccactt ttgctcgctt 2100
gtgccaacaa gttgatatta ctcaaaaaca gctggaagaa gaaattgcta gattacccaa 2160
agaaatagat cagttggaga aaatacaaaa caattcaaag ctcttaagaa ataaagctgt 2220
tcaacttgaa aatgagctgg agaattttac taagcagttt ctaccttcaa gcaatgaaga 2280
ctcctaacaa aactagtttt tttggtgacc atgataggag gaaacgaaac ttgtaagatt 2340
ggaacagttg ttatttttat gaaattactt taaatatgaa ttgtactaac tgtacctaaa 2400
tagcaaagcc ctgtgtagat tctggtaatg atctgtctca gggtagtgtt atttttgaag 2460
agtgttatgt ccttagtttt aattttgagt aaagaaaagg cttaatcatg aattagttac 2520
aagcaacagt accaacttat gtgacccctg aggggtgggg ctgtgagctc ttaatttggt 2580
tttgattctg aaaaactctg cttcctggca tccaggagtt agagattgag cctttcatct 2640
tctttctcaa aactagtttt tgatgccttc tttcatggga atagtcactt ttttatttag 2700
taaatacgcat tgctggaacc accaaggagt gtggaatgtc cttgagtgtt ttatttatgc 2760
aagtcacagt cacgttgcca tcatggcagc tatgtgaaac actaataaat gtgtttttac 2820
tttttattcc cgttaaaact gatgtaaaac aggataaagg cttgttatag tcacttataa 2880
gtatctgggt ctaagtaatt tccttagatg tttctaaaga aacattttca gctttgctcc 2940
cattatgatt ccaataagga acgctttcct agtgcaattt taggagtaaa gtttgaagag 3000
ataaaaaatag ccaaagatag gagacgtctg aattttgaaat gataaacagt gatgttttaa 3060
aaaagctgtt gttcttcagg aggcatttgc ctaggatatt gctggattat accccattgg 3120
aggcttttaa ttttatttgt atgaattttc caggatttca ttaaaaatta ttattgtatt 3180
ttttacctta aaaaaaaaaa aaaa 3204

```

<210> 30
 <211> 741
 <212> PRT
 <213> Homo sapiens

<400> 30
 Met Ala Glu Pro Val Ser Pro Leu Lys His Phe Val Leu Ala Lys Lys
 1 5 10 15
 Ala Ile Thr Ala Ile Phe Asp Gln Leu Leu Glu Phe Val Thr Glu Gly
 20 25 30
 Ser His Phe Val Glu Ala Thr Tyr Lys Asn Pro Glu Leu Asp Arg Ile
 35 40 45
 Ala Thr Glu Asp Asp Leu Val Glu Met Gln Gly Tyr Lys Asp Lys Leu
 50 55 60
 Ser Ile Ile Gly Glu Val Leu Ser Arg Arg His Met Lys Val Ala Phe
 65 70 75 80
 Phe Gly Arg Thr Ser Ser Gly Lys Ser Ser Val Ile Asn Ala Met Leu
 85 90 95
 Trp Asp Lys Val Leu Pro Ser Gly Ile Gly His Ile Thr Asn Cys Phe
 100 105 110

6069-74A.SEQ.txt

Leu Ser Val Glu Gly Thr Asp Gly Asp Lys Ala Tyr Leu Met Thr Glu
 115 120 125
 Gly Ser Asp Glu Lys Lys Ser Val Lys Thr Val Asn Gln Leu Ala His
 130 135 140
 Ala Leu His Met Asp Lys Asp Leu Lys Ala Gly Cys Leu Val Arg Val
 145 150 155 160
 Phe Trp Pro Lys Ala Lys Cys Ala Leu Leu Arg Asp Asp Leu Val Leu
 165 170 175
 Val Asp Ser Pro Gly Thr Asp Val Thr Thr Glu Leu Asp Ser Trp Ile
 180 185 190
 Asp Lys Phe Cys Leu Asp Ala Asp Val Phe Val Leu Val Ala Asn Ser
 195 200 205
 Glu Ser Thr Leu Met Asn Thr Glu Lys His Phe Phe His Lys Val Asn
 210 215 220
 Glu Arg Leu Ser Lys Pro Asn Ile Phe Ile Leu Asn Asn Arg Trp Asp
 225 230 235 240
 Ala Ser Ala Ser Glu Pro Glu Tyr Met Glu Asp Val Arg Arg Gln His
 245 250 255
 Met Glu Arg Cys Leu His Phe Leu Val Glu Glu Leu Lys Val Val Asn
 260 265 270
 Ala Leu Glu Ala Gln Asn Arg Ile Phe Phe Val Ser Ala Lys Glu Val
 275 280 285
 Leu Ser Ala Arg Lys Gln Lys Ala Gln Gly Met Pro Glu Ser Gly Val
 290 295 300
 Ala Leu Ala Glu Gly Phe His Ala Arg Leu Gln Glu Phe Gln Asn Phe
 305 310 315 320
 Glu Gln Ile Phe Glu Glu Cys Ile Ser Gln Ser Ala Val Lys Thr Lys
 325 330 335
 Phe Glu Gln His Thr Ile Arg Ala Lys Gln Ile Leu Ala Thr Val Lys
 340 345 350
 Asn Ile Met Asp Ser Val Asn Leu Ala Ala Glu Asp Lys Arg His Tyr
 355 360 365
 Ser Val Glu Glu Arg Glu Asp Gln Ile Asp Arg Leu Asp Phe Ile Arg
 370 375 380
 Asn Gln Met Asn Leu Leu Thr Leu Asp Val Lys Lys Lys Ile Lys Glu
 385 390 395 400
 Val Thr Glu Glu Val Ala Asn Lys Val Ser Cys Ala Met Thr Asp Glu
 405 410 415
 Ile Cys Arg Leu Ser Val Leu Val Asp Glu Phe Cys Ser Glu Phe His
 420 425 430
 Pro Asn Pro Asp Val Leu Lys Ile Tyr Lys Ser Glu Leu Asn Lys His
 435 440 445

6069-74A.SEQ.txt

Ile Glu Asp Gly Met Gly Arg Asn Leu Ala Asp Arg Cys Thr Asp Glu
 450 455 460
 Val Asn Ala Leu Val Pro Gln Thr Gln Gln Glu Ile Ile Glu Asn Leu
 465 470 475 480
 Lys Pro Leu Leu Pro Ala Gly Ile Gln Asp Lys Leu His Thr Leu Ile
 485 490 495
 Pro Cys Lys Lys Phe Asp Leu Ser Tyr Asn Leu Asn Tyr His Lys Leu
 500 505 510
 Cys Ser Asp Phe Gln Glu Asp Ile Val Phe Arg Phe Ser Leu Gly Trp
 515 520 525
 Ser Ser Leu Val His Arg Phe Leu Gly Pro Arg Asn Ala Gln Arg Val
 530 535 540
 Leu Leu Gly Leu Ser Glu Pro Ile Phe Gln Leu Pro Arg Ser Leu Ala
 545 550 555 560
 Ser Thr Pro Thr Ala Pro Thr Thr Pro Ala Thr Pro Asp Asn Ala Ser
 565 570 575
 Gln Glu Glu Leu Met Ile Thr Leu Val Thr Gly Leu Ala Ser Val Thr
 580 585 590
 Ser Arg Thr Ser Met Gly Ile Ile Ile Val Gly Gly Val Ile Trp Lys
 595 600 605
 Thr Ile Gly Trp Lys Leu Leu Ser Val Ser Leu Thr Met Tyr Gly Ala
 610 615 620
 Leu Tyr Leu Tyr Glu Arg Leu Ser Trp Thr Thr His Ala Lys Glu Arg
 625 630 635 640
 Ala Phe Lys Gln Gln Phe Val Asn Tyr Ala Thr Glu Lys Leu Arg Met
 645 650 655
 Ile Val Ser Ser Thr Ser Ala Asn Cys Ser His Gln Val Lys Gln Gln
 660 665 670
 Ile Ala Thr Thr Phe Ala Arg Leu Cys Gln Gln Val Asp Ile Thr Gln
 675 680 685
 Lys Gln Leu Glu Glu Glu Ile Ala Arg Leu Pro Lys Glu Ile Asp Gln
 690 695 700
 Leu Glu Lys Ile Gln Asn Asn Ser Lys Leu Leu Arg Asn Lys Ala Val
 705 710 715 720
 Gln Leu Glu Asn Glu Leu Glu Asn Phe Thr Lys Gln Phe Leu Pro Ser
 725 730 735
 Ser Asn Glu Asp Ser
 740

<210> 31
 <211> 2483
 <212> DNA
 <213> Homo sapiens

6069-74A.SEQ.txt

```

<400> 31
cacatgtttgc cccaaataca agcacaaatc taaccatgag cttcagcaat cagctcaata 60
cagtgacaaa tcaggccagt gttctagctt ccagttctac tgcagcagct gctactcttt 120
ctctggctaa ttcagatgtc tctactactaa actaccagtc agctttgtac ccatcatctg 180
ctgcaccagt tcctggagtt gccagcagg gtgtttcctt gcagcctgga accaccacaga 240
tttgactca gacagatcca ttccaacaga catttatagt atgtccacct gcgtttcaaa 300
ctggactaca agcaacaaca aagcattctg gattccctgt gaggatggat aatgctgtac 360
cgattgtacc ccaggcacca gctgctcagc ccactacaga ttcagtcagg agttctcacg 420
cagacttgca gggaaaaaat atccagacat tcttgagaaa tggctctctg aggaagctgt 480
acaccactaa tggtagcaac tctccaccct caagtagcca catcacaccg cagtatgcgg 540
tgccctttac tctgagctgc gcagccggcc ggccggcgct ggttgaacag actgccgctg 600
tactgcaggc gtggcctgga gggactcagc aaattctcct gccttcaact tggcaacagt 660
tgcctggggt agctctacac aactctgtcc agcccacagc aatgattcca gaggccatgg 720
ggagtggaca gcagctagct gactggagga atgccactc tcatggcaac cagtacagca 780
ctatcatgca gcagccatcc ttgtgacta accatgtgac attggccact gctcagcctc 840
tgaatgttgg tgttgcccat gttgtcagac aacaacaatc cagttccctc ctttcaaga 900
agaataagca gtcagctcca gtctcttcca agtcctctct agatgttctg ctttcccaag 960
tctattctct ggttgggagc agtccccctc gcaccacatc ttcttataat tccttgggtc 1020
ctgtccaaga tcagcatcag cccatcatca ttccagatac tcccagccct cctgtgagtg 1080
tcatacacta ccgaagtgc actgatgagg aagaggacaa caaatacaag cccagtagct 1140
ctggactgaa gccaaagtct aatgtcatca gttatgtcac tgtcaatgat tctccagact 1200
ctgactcttc tttagcagc ctttattcca ctgataccct gagtgtcttc cgaggcaata 1260
gtggatccgt tttagagggg cctggcagag ttgtggcaga tggcactggc acccgacta 1320
tcattgtgcc tccactgaaa actcagcttg gtgactgcac tgtagcaacc caggcctcag 1380
gtctcctgag caataagact aagccagtcg cttcagtgag tgggcagtca tctggatgct 1440
gtatcacccc cacagggtat cgagctcaac gcggggggac cagtgcagca caaccactca 1500
atcttagcca gaaccagcag tcatcggcgg ctccaacctc acaggagaga agcagcaacc 1560
cagcccccg caggcagcag gcgtttgtgg cccctctctc ccaagcccc tacaccttcc 1620
agcatggcag cccgtacac tcgacagggc acccacacct tgccccggcc cctgctcacc 1680
tgccaagcca ggctcatctg tatacgtatg ctgccccgac ttctgctgct gcactgggtc 1740
caaccagctc cattgtcat cttttctccc cacagggttc ctcaaggcat gctgcagcct 1800
ataccactca ccctgacct ttggtgcacc aggtccctgt cagtgttggg cccagcctcc 1860
tcacttctgc cagcgtggcc cctgctcagt accaacacca gtttgccacc caatcctaca 1920
ttgggtcttc ccgaggctca acaatttaca ctggataccc gctgagtcct accaagatca 1980
gccagtattc ctacttatag ttggtgagca tgagggagga ggaatcatgg ctaccttctc 2040
ctggccctgc gttcttaata ttgggctatg gagagatcct cttttaccct cttgaaattt 2100
cttagccagc aacttgttct gcagggggccc actgaagcag aagggttttc tctgggggaa 2160
cctgtctcag tgttgactgc attgttgtag tcttcccaaa gtttgcccta tttttaaatt 2220
cattattttt gtgacagtaa ttttggtact tggaagagtt cagatgcca tcttctgcag 2280
ttaccaagga agagagattg ttctgaagtt accctctgaa aaatattttg tctctctgac 2340
ttgatttcta taaatgcttt taaaaacaag tgaagccctt ctttatttca ttttgtgta 2400
ttgtgattgc tggtcaggaa aaatgctgat agaaggagtt gaaatctgat gacaaaaaaa 2460
aaaaaaaaaa aaaaaaaaaa aaa 2483

```

<210> 32

<211> 654

<212> PRT

<213> Homo sapiens

<400> 32

Met Ser Phe Ser Asn Gln Leu Asn Thr Val His Asn Gln Ala Ser Val
 1 5 10 15

Leu Ala Ser Ser Ser Thr Ala Ala Ala Thr Leu Ser Leu Ala Asn
 20 25 30

Ser Asp Val Ser Leu Leu Asn Tyr Gln Ser Ala Leu Tyr Pro Ser Ser
 35 40 45

Ala Ala Pro Val Pro Gly Val Ala Gln Gln Gly Val Ser Leu Gln Pro
 50 55 60

Gly Thr Thr Gln Ile Cys Thr Gln Thr Asp Pro Phe Gln Gln Thr Phe
 Page 30

6069-74A.SEQ.txt

65	70	75	80
Ile Val Cys Pro	Pro 85	Ala Phe Gln Thr Gly 90	Leu Gln Ala Thr Thr Lys 95
His Ser Gly	Phe 100	Pro Val Arg Met Asp 105	Asn Ala Val Pro Ile Val Pro 110
Gln Ala Pro	Ala 115	Ala Gln Pro Thr 120	Thr Asp Ser Val Arg Ser Ser His 125
Ala Asp	Leu 130	Gln Gly Lys Asn 135	Ile Gln Thr Phe Leu Arg Asn Gly Leu 140
Leu Arg Lys	Leu 145	Tyr Thr Thr Asn Gly Ser 150	Asn Ser Pro Pro Ser Ser 155 160
Ser His Ile Thr	Pro 165	Gln Tyr Ala Val Pro 170	Phe Thr Leu Ser Cys Ala 175
Ala Gly Arg	Pro 180	Ala Leu Val Glu Gln 185	Thr Ala Ala Val Leu Gln Ala 190
Trp Pro Gly	Gly 195	Thr Gln Gln Ile 200	Leu Leu Pro Ser Thr 205
Leu Pro Gly	Val 210	Ala Leu His Asn 215	Ser Val Gln Pro Thr Ala Met Ile 220
Pro Glu Ala	Met 225	Gly Ser Gly Gln Gln Leu 230	Ala Asp Trp Arg Asn Ala 235 240
His Ser His	Gly 245	Asn Gln Tyr Ser Thr Ile 250	Met Gln Gln Pro Ser Leu 255
Leu Thr Asn	His 260	Val Thr Leu Ala Thr 265	Ala Gln Pro Leu Asn Val Gly 270
Val Ala His	Val 275	Val Arg Gln Gln Gln Ser 280	Ser Ser Ser Leu Pro Ser Lys 285
Lys Asn	Lys 290	Gln Ser Ala Pro 295	Val Ser Ser Lys Ser Ser Leu Asp Val 300
Leu Pro Ser	Gln 305	Val Tyr Ser Leu Val Gly 310	Ser Ser Pro Leu Arg Thr 315 320
Thr Ser Ser	Tyr 325	Asn Ser Leu Val Pro 330	Val Gln Asp Gln His Gln Pro 335
Ile Ile Ile	Pro 340	Asp Thr Pro Ser Pro 345	Pro Val Ser Val Ile Thr Ile 350
Arg Ser Asp	Thr 355	Asp Glu Glu Glu 360	Asp Asn Lys Tyr Lys Pro Ser Ser 365
Ser Gly	Leu 370	Lys Pro Arg Ser 375	Asn Val Ile Ser Tyr Val Thr Val Asn 380
Asp Ser Pro	Asp 385	Ser Ser Ser Leu Ser 390	Ser Pro Tyr Ser Thr Asp 395 400
Thr Leu Ser	Ala 405	Leu Arg Gly Asn Ser Gly 410	Ser Val Leu Glu Gly Pro 415

6069-74A.SEQ.txt
410

405 415
Gly Arg Val Val Ala Asp Gly Thr Gly Thr Arg Thr Ile Ile Val Pro
420 425 430
Pro Leu Lys Thr Gln Leu Gly Asp Cys Thr Val Ala Thr Gln Ala Ser
435 440 445
Gly Leu Leu Ser Asn Lys Thr Lys Pro Val Ala Ser Val Ser Gly Gln
450 455 460
Ser Ser Gly Cys Cys Ile Thr Pro Thr Gly Tyr Arg Ala Gln Arg Gly
465 470 475 480
Gly Thr Ser Ala Ala Gln Pro Leu Asn Leu Ser Gln Asn Gln Gln Ser
485 490 495
Ser Ala Ala Pro Thr Ser Gln Glu Arg Ser Ser Asn Pro Ala Pro Arg
500 505 510
Arg Gln Gln Ala Phe Val Ala Pro Leu Ser Gln Ala Pro Tyr Thr Phe
515 520 525
Gln His Gly Ser Pro Leu His Ser Thr Gly His Pro His Leu Ala Pro
530 535 540
Ala Pro Ala His Leu Pro Ser Gln Ala His Leu Tyr Thr Tyr Ala Ala
545 550 555 560
Pro Thr Ser Ala Ala Ala Leu Gly Ser Thr Ser Ser Ile Ala His Leu
565 570 575
Phe Ser Pro Gln Gly Ser Ser Arg His Ala Ala Ala Tyr Thr Thr His
580 585 590
Pro Ser Thr Leu Val His Gln Val Pro Val Ser Val Gly Pro Ser Leu
595 600 605
Leu Thr Ser Ala Ser Val Ala Pro Ala Gln Tyr Gln His Gln Phe Ala
610 615 620
Thr Gln Ser Tyr Ile Gly Ser Ser Arg Gly Ser Thr Ile Tyr Thr Gly
625 630 635 640
Tyr Pro Leu Ser Pro Thr Lys Ile Ser Gln Tyr Ser Tyr Leu
645 650

<210> 33
<211> 2731
<212> DNA
<213> Homo sapiens

<220>
<221> unsure
<222> (2173)

<220>
<221> unsure
<222> (2700)

<400> 33
ggcactccac ggctgtgaag atggcggcgg ctgcgtggct tcaggtgttg cctgtcattc 60
Page 32

6069-74A.SEQ.txt

```

ttctgcttct gggagctcac ccgtcaccac tgtcgttttt cagtgcggga ccggcaaccg 120
tagctgctgc cgaccgggtcc aaatggcaca ttccgatacc gtcggggaaa aattatttta 180
gttttggaag gatcctcttc agaaatacca ctatcttcct gaagtttgat ggagaacctt 240
gtgacctgtc tttgaatata acctggtatc tgaaaagcgc tgattgttac aatgaaatct 300
ataacttcaa ggcagaagaa gtagagttgt atttggaaaa acttaaggaa aaaagaggct 360
tgtctgggaa atatcaaaca tcatcaaaat tgttccagaa ctgcagttaa ctctttaaaa 420
cacagacctt ttctggagat tttatgcatc gactgcctct tttaggagaa aaacaggagg 480
ctaaggagaa tggaacaaac cttaccttta ttggagacaa aaccgcaatg catgaaccat 540
tgcaaacttg gcaagatgca ccatacattt ttattgtaca tattggcatt tcatcctcaa 600
aggaatcatc aaaagaaaat tcaactgagta atctttttac catgactgtt gaagtgaagg 660
gtccctatga atacctcaca cttgaagact atcccttgat gatttttttc atggtgatgt 720
gtattgtata tgcctgtttt ggtgttctgt ggctggcatg gtctgcctgc tactggagag 780
atctcctgag aattcagttt tggattgggt ctgtcatctt cctgggaatg cttgagaaag 840
ctgtcttcta tgcggaattt cagaatatcc gacacaaagg agaactctgt cagggtgctt 900
tgatccttgc agagctgtt tccagcagtg aacgcctact ggctcgaacc ctggctcatc 960
tagtcagtct gggatatggc atcgtcaagc cagccttgg agtcactctt cataagggtt 1020
tagtagcagg agccctctat cttttgttct ctggcatgga aggggtcctc agagttactg 1080
gggcccagac tgatcttgct tccttggcct ttatccccct ggctttccta gacactgcct 1140
tgtgctgggt gatattttat agcctgactc aaacaatgaa gctattaaaa cttcggagga 1200
acattgtaaa actctctttt tatcggcatt tcaccaacac gcttattttg gcagtggcag 1260
catccattgt gtttatcatc tggacaacca tgaagttcag aatagtgaac tgctagtcgg 1320
tgagttataa gcacatttat gaataatgta ctgtcttata aacaactgat ggtgttgatg 1380
acagtggtaa ggttcttcta agttatatac cttataaaaa attagagcta ggtctctact 1440
ctgaggggtt tgatacttcc ctctccttaa gtattctgta ctatcatggt gcttgggtata 1500
gtactttttt gtttgttttt tctgactgta ttctcccagt tttgggagag aattttgtaa 1560
gtttataacta cagtgtgcta taaccagctc ttattttaac taaaaatctt aagaagtcca 1620
gagtactaaa tattaagtac cataatgta aataatacta atctgaatag aagccacatc 1680
cttaagatct gagtcaacg actgtgacag taggatttct tcagaagcag ctaaggctct 1740
tattttgttc aataaataat gaaaatgaaa attataaagt ataccaacct aatgtaactt 1800
tctcttacac tgtataagggt aactttctct taaccctgta taaaaccctt tcttaaagct 1860
tctcagaggg atgatgaagc tttgacaaat actctgttcc gttgatgcat tttctttaac 1920
aacagtaagc actacaaggg caaaaactac attcattcac tttgtttccc cacacttacc 1980
acagtactga gcacgtagca ggctcttagt aaacataact tgaatgaaca aataagtgat 2040
ttttgttgta tgccaaaggc tttatgaaca aggggttaag ataatgtgta tgaatgttgt 2100
acttctcccc tgtattgtag gactggcggg agctgtgggt agacgatgcc atctggcgct 2160
tgctgttctc cangatcctc tttgtcatca tggttctctg gcgaccatct gcaaacaacc 2220
agaggttctt ggactcttct gtttactctg ctaacatgag atgaccatgt catcaattag 2280
gggtgggtga ttgggggaca gtatcagggc tgtgtcatat agtgggaagg acactggggc 2340
tggaatcaga agaactgggt tcctatctca gctctctctt taacttcatg atttttggca 2400
tgcggcctct ccacctctct ggccttagtt tcctttctat atactgaggg ggaattaaac 2460
ccagcaacat gaagttcctt tcagctctga cattttgtga taaatacaca ggcatactat 2520
ggaaataaat tgcaagtttg gtttcagacc atcacgataa agcagatatt gagttacata 2580
catattttgt tttttccagt gcataatcaa gttatgttta cactattctg tagtctacta 2640
tgtgtgcaat agcattatgt ctaaaaaata tatgcacggt aattttaaaa cactttgttn 2700
ccaaaaaaaa aaaaaaaaaa aaaaaaaaaa a 2731

```

<210> 34
 <211> 441
 <212> PRT
 <213> Homo sapiens

<400> 34
 Met Ala Ala Ala Ala Trp Leu Gln Val Leu Pro Val Ile Leu Leu
 1 5 10 15
 Leu Gly Ala His Pro Ser Pro Leu Ser Phe Phe Ser Ala Gly Pro Ala
 20 25 30
 Thr Val Ala Ala Ala Asp Arg Ser Lys Trp His Ile Pro Ile Pro Ser
 35 40 45
 Gly Lys Asn Tyr Phe Ser Phe Gly Lys Ile Leu Phe Arg Asn Thr Thr
 50 55 60

6069-74A.SEQ.txt

Ile Phe Leu Lys Phe Asp Gly Glu Pro Cys Asp Leu Ser Leu Asn Ile
 65 70 75 80
 Thr Trp Tyr Leu Lys Ser Ala Asp Cys Tyr Asn Glu Ile Tyr Asn Phe
 85 90 95
 Lys Ala Glu Glu Val Glu Leu Tyr Leu Glu Lys Leu Lys Glu Lys Arg
 100 105 110
 Gly Leu Ser Gly Lys Tyr Gln Thr Ser Ser Lys Leu Phe Gln Asn Cys
 115 120 125
 Ser Glu Leu Phe Lys Thr Gln Thr Phe Ser Gly Asp Phe Met His Arg
 130 135 140
 Leu Pro Leu Leu Gly Glu Lys Gln Glu Ala Lys Glu Asn Gly Thr Asn
 145 150 155 160
 Leu Thr Phe Ile Gly Asp Lys Thr Ala Met His Glu Pro Leu Gln Thr
 165 170 175
 Trp Gln Asp Ala Pro Tyr Ile Phe Ile Val His Ile Gly Ile Ser Ser
 180 185 190
 Ser Lys Glu Ser Ser Lys Glu Asn Ser Leu Ser Asn Leu Phe Thr Met
 195 200 205
 Thr Val Glu Val Lys Gly Pro Tyr Glu Tyr Leu Thr Leu Glu Asp Tyr
 210 215 220
 Pro Leu Met Ile Phe Phe Met Val Met Cys Ile Val Tyr Val Leu Phe
 225 230 235 240
 Gly Val Leu Trp Leu Ala Trp Ser Ala Cys Tyr Trp Arg Asp Leu Leu
 245 250 255
 Arg Ile Gln Phe Trp Ile Gly Ala Val Ile Phe Leu Gly Met Leu Glu
 260 265 270
 Lys Ala Val Phe Tyr Ala Glu Phe Gln Asn Ile Arg His Lys Gly Glu
 275 280 285
 Ser Val Gln Gly Ala Leu Ile Leu Ala Glu Leu Leu Ser Ala Val Lys
 290 295 300
 Arg Ser Leu Ala Arg Thr Leu Val Ile Ile Val Ser Leu Gly Tyr Gly
 305 310 315 320
 Ile Val Lys Pro Arg Leu Gly Val Thr Leu His Lys Val Val Val Ala
 325 330 335
 Gly Ala Leu Tyr Leu Leu Phe Ser Gly Met Glu Gly Val Leu Arg Val
 340 345 350
 Thr Gly Ala Gln Thr Asp Leu Ala Ser Leu Ala Phe Ile Pro Leu Ala
 355 360 365
 Phe Leu Asp Thr Ala Leu Cys Trp Trp Ile Phe Ile Ser Leu Thr Gln
 370 375 380
 Thr Met Lys Leu Leu Lys Leu Arg Arg Asn Ile Val Lys Leu Ser Leu
 385 390 395 400

6069-74A.SEQ.txt

Tyr Arg His Phe Thr Asn Thr Leu Ile Leu Ala Val Ala Ala Ser Ile
405 410 415
Val Phe Ile Ile Trp Thr Thr Met Lys Phe Arg Ile Val Thr Cys Gln
420 425 430
Ser Val Ser Tyr Lys His Ile Tyr Glu
435 440

<210> 35
<211> 1670
<212> DNA
<213> Homo sapiens

<400> 35
aatcgggctc accccaagt tgggcgggtc attgacaagt cgaagagttg ggtccttgtg 60
tatgcatggg tgggatggta aggggaagaag ccttggcctg gatgtgccgg gaaccccgga 120
aagccttctc agccattggt gggccttagcc tgggaccgga cagcactcct ggggtggggga 180
ctggggagtg ggcaacaggt ggagccatcc ttggcagacc gaccccatgt gcagtccctg 240
ggacagggtt ctccctcctg agcacttgta gctccccctg agggccagtt ccagagacag 300
gccgaggggtg gcgagtcccc accccatgct ctcttccaga cctcctacga gatgatgatg 360
cagtgtgtgt cccgcatggt ggcccacccc ctgcatgtca tctcaatgcg ctgcatggtc 420
cagtttgtgg gacgggaggg caagtacagt ggtgtgctga gctccattgg gaagattttc 480
aaagaggaag ggctgctggg attcttcggt ggattaatcc ctacacctct gggcgatgtg 540
gttttcttgt ggggctgtaa cctgctggcc cacttcatca atgcctacct ggtggatgac 600
agcttcagcc aggccctggc catccggagc tataccaagt tcgtgatggg gattgcagtg 660
agcatgctga cctacccctt cctgctagtt ggcgacctca tggctgtgaa caactgcggg 720
ctgcaagctg ggctcccccc ttactcccca gtgttcaaat cctggattca ctgctggaag 780
tacctgagtg tgcagggcca gctcttccga ggctccagcc tgcttttccg ccgggtgtca 840
tcaggatcat gctttgccct ggagtaacct gaatcatcta aaaaacacgg tctcaacctg 900
gccaccgtgg gtgaggcctg accaccttgg gacacctgca agacgactcc aaccaacaa 960
caaccagatg tgctccagcc cagccgggct tcagttccat atttgccatg tgtctgtcca 1020
gatgtggggg tgagcggggg tggggctgca cccagtggat tgggtcaccc ggcagacctg 1080
gggaagggtg ggcgagggtg ggagttggca gaatccccat acctcgaga ttgtctgagt 1140
ctgtcttgtg cagagggcca gagaatggct tatggggggc caggttggat ggggaaaggc 1200
taatggggtc agaccccacc ccgtctaccc ctccagtcag cccagcgccc atcctgcagc 1260
tcagctggga gcatcattct cctgctttgt acatagggtg tgggtcccctg gcacgtggcc 1320
accatcatgt ctaggcctat gctaggaggc aaatggccag gctctgcctg tgtttttctc 1380
aacactactt ttctgatatg agggcagcac ctgcctctga atgggaaatc atgcaactac 1440
tcagaatgtg tcctcctcat ctaatgctca tctgtttaat ggtgatgcct cgcgtacagg 1500
atctggttac ctgtgcagtt gtgaataccc agaggttggg cagatcagtg tctctagtcc 1560
taccagttt taaagtccat ggtaagattt gacctcatct cccgcaaata aatgtattgg 1620
tgatttggaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa 1670

<210> 36
<211> 164
<212> PRT
<213> Homo sapiens

<400> 36
Met Gly Gly Met Val Arg Glu Glu Ala Leu Ala Trp Met Cys Arg Glu
1 5 10 15
Pro Arg Lys Ala Phe Ser Ala Ile Val Gly Pro Ser Leu Gly Pro Asp
20 25 30
Ser Thr Pro Gly Trp Gly Thr Gly Glu Trp Ala Thr Gly Gly Ala Ile
35 40 45
Leu Gly Arg Pro Thr Pro Cys Ala Val Pro Gly Thr Gly Phe Ser Leu
50 55 60

6069-74A.SEQ.txt

Leu Ser Thr Cys Ser Ser Pro Arg Gly Pro Val Pro Glu Thr Gly Arg
65 70 75 80
Gly Trp Arg Val Pro Thr Pro Cys Ser Leu Pro Asp Leu Leu Arg Asp
85 90 95
Asp Asp Ala Val Cys Val Pro His Val Gly Pro Pro Pro Ala Cys His
100 105 110
Leu Asn Ala Leu His Gly Pro Val Cys Gly Thr Gly Gly Gln Val Gln
115 120 125
Trp Cys Ala Glu Leu His Trp Glu Asp Phe Gln Arg Gly Arg Ala Ala
130 135 140
Gly Ile Leu Arg Trp Ile Asn Pro Ser Pro Pro Gly Arg Cys Gly Phe
145 150 155 160
Leu Val Gly Leu

<210> 37
<211> 1493
<212> DNA
<213> Homo sapiens

<220>
<221> unsure
<222> (1415)

<400> 37
ggatggcgcg cgcgggggccc gcacgtggag gccggcgcgg gggcgcgggc agggccggct 60
gctgagacgc gctgctgccc cccgcgcggg cgccgcggct tcaatggcgc catcgcccag 120
gaccggcagc cggcaagatg cgaccgccct gccagcatg tcctcaactt tctgggcgtt 180
catgacccctg gccagcctgc tcatcgcccta ctgcagtcag ctggccgccc gcacctgtga 240
gattgtgacc ttggaccggg acagcagcca gcctcggagg acgatcgccc ggcagaccgc 300
ccgctgtgcg tgtagaaagg ggcagatcgc cggcaccacg agagcccggc ccgccttgtt 360
ggacgcaaga atcatcaaga ccaagcagtg gtgtgacatg cttccgtgtc tggaggggga 420
aggctgcgac ttgttaatca accggtcagg ctggacgtgc acgcagcccg gcgggaggat 480
aaagaccacc acggtctcct gacaaacaca gcccctgagg ggccccggga gtggccttgg 540
ctccctggag agcccacgtc tcagccacag ttctccactc gcctcggact tcacccgttc 600
ttgcccggcc gccactccg tttccctgtg gtccgtgaag gacggcctca ggccttggca 660
tcctgagctt ctgtctgtcc agccgacccg aggaggccgg actcagacac ataggcgggg 720
ggcggcacct ggcacagca atacgcagtc tgtgggagcc cggccgcgcc cagccccgc 780
cgaccgtggc gttggccctg ctgtcctcag aggaggagga ggaggaggca gctccggcag 840
ccacagaagg ctgcagcccc gcccgcctga gacacgacgc ctgccccagg ggactgtcag 900
gcacagaagc ggcctcctcc cgtgccccag actgtccgaa ttgggtttat tttcttatac 960
tttcagtata ctccatagac caaagagcaa aatctatctg aacctggacg caccctcact 1020
gtcagggtcc ctggggctgc ttgtgcgggc gggagggcaa tgggtggcaga gacatgctgt 1080
ggccccggcg gagcggagag ggcggccgtg gtggaggcct ccaccccagg agcaccgcc 1140
gcaccctcgg aggacgggtt tcggctgcgc ggaggccgtg gcacacctgc gggaggcagc 1200
gacggccccc acgcagacgc cgggaacgca ggccgcttta ttcctctgta cttagatcaa 1260
cttgaccgta ctaaaatccc tttctgtttt aaccagttaa acatgcctct tctacagctc 1320
catttttgat agttggataa tccagtatct gccaaagca tgttgggtct cccgtgactg 1380
ctgcctcatc gatacccat ttagctccag aaagnaagaa aaactcgagt aacacttgtt 1440
tgaaagagat cattaaatgt attttgcaaa gcctaaaaaa aaaaaaaaaa aaa 1493

<210> 38
<211> 132
<212> PRT
<213> Homo sapiens

6069-74A.SEQ.txt

<400> 38

Met Ala Pro Ser Pro Arg Thr Gly Ser Arg Gln Asp Ala Thr Ala Leu
 1 5 10 15
 Pro Ser Met Ser Ser Thr Phe Trp Ala Phe Met Ile Leu Ala Ser Leu
 20 25 30
 Leu Ile Ala Tyr Cys Ser Gln Leu Ala Ala Gly Thr Cys Glu Ile Val
 35 40 45
 Thr Leu Asp Arg Asp Ser Ser Gln Pro Arg Arg Thr Ile Ala Arg Gln
 50 55 60
 Thr Ala Arg Cys Ala Cys Arg Lys Gly Gln Ile Ala Gly Thr Thr Arg
 65 70 75 80
 Ala Arg Pro Ala Cys Val Asp Ala Arg Ile Ile Lys Thr Lys Gln Trp
 85 90 95
 Cys Asp Met Leu Pro Cys Leu Glu Gly Glu Gly Cys Asp Leu Leu Ile
 100 105 110
 Asn Arg Ser Gly Trp Thr Cys Thr Gln Pro Gly Gly Arg Ile Lys Thr
 115 120 125
 Thr Thr Val Ser
 130

<210> 39

<211> 3693

<212> DNA

<213> Homo sapiens

<220>

<221> unsure

<222> (108)

<400> 39

cgtggccgaa ggatgcccgt ttgtgtctaa acggaggctc ggccacaacg cccctggatt 60
 ggtggtaggg cggggcgggc cacagtctcc accctgaagc ggaagtgnag gaaagatgga 120
 ggaccatcac cagtgccca tcgacatcca gaccagccag ctgctcgatt ggctggtgga 180
 cagaaggcac tgcagcctga aatggcagag tctggtgctg acgatccgcg agaagatcaa 240
 tgctgccatc caggacatgc cagagagcga agagatcgcc cagctgctgt ctgggtcctg 300
 tgagtgttta ggggctgtca ctggagtccc ctctttgctg aggtagtatg tatcagctga 360
 gctactctct tgttatttag ccaccagggc tggccttttag agagggagcg atttttattt 420
 gaggtataga tgctggcttc ttccactatg aaatgattta gggaaaagct acacactaaa 480
 gttactggca gtatattata catgaatcag ccacctgcag tgcccagagt aggtgaagaa 540
 gatacttttag ttctcgaaat cccgtctctt gctttctaga cattcactac tttcactgcc 600
 taagaatcct ggaccttctc aaaggcacag aggcctccac gaagaatatt tttggccgat 660
 actcttcaca gcggatgaag gattggcagg agattatagc tctgtatgag aaggacaaca 720
 cctacttagg taaagtggcc cggcctggga gccctggtat ccatggggaa gcccactctc 780
 agagtcttga gataccaggc ttataggagg cacagtctgt gagtgggaag agactggagt 840
 gtagatgttg cccatttgta ggtggtaaaa tcaattgttt ttgatggaat tgattttccc 900
 tgagtggagt gctgggggaa ggaggagggtc caggccggta gtggccattc gccgtgcctc 960
 agcgagcagg tgtgtgtggg tcctccacca ctcacctctt ggtagcggg agtgtgtctg 1020
 cccaccccc accccgtac cccattgta cacaaggcag aagaggcacg ggttttcctg 1080
 ggagcgaata tcaagtgcct gagagcaact acaggactaa ctgtgttttg gttgggtgta 1140
 gtataaataa taataatggc taatatttcc tgagcatcta ctaaatgcaa ggaattgtgc 1200
 ttggtgtgtc atgtggattc tctcttgcac cttcatgata aatgttattg tgcgtgtttt 1260
 accgatgagg gttggattag aggggttaaa caacttgtct taggctccac agctgggaac 1320
 aagtggggct ggggaagtga cttcgtgctc ttcaccacca caaaggatgt gtgtgcatcc 1380

6069-74A.SEQ.txt

```

tggggcatgc ctgcctcatg tgggggtgtc ctgggctgaa tttcctgggc acttctcagt 1440
ggaactctct agcctcctgg ttcggaatgt caactatgag atccccctcac tgaagaagca 1500
gattgccaag tgccagcagc tgcagcaaga atacagccgc aaggaggagg agtgccaggc 1560
aggggctgcc gagatgcggg agcagttcta ccactcctgc aagcagtatg gcatcacggt 1620
gagcggcggc agcctcttcg cagccagagg acacctgggc ccctgcttgt cttcctctga 1680
ccccgtctga cccctcagcc tggttgcgcc ccctttgggc cagtgtctta cttttcttcg 1740
gtctttggat gttttcttca atctgttggg ctccacctct tctccccctt ctagggcgaa 1800
aatgtccgag gagaactgct ggccctggtg aaggacctgc cgagtcagct ggctgagatt 1860
ggggcagcgg ctccagcagc cctgggggaa gccattgacg tgtaccaggc gtctgtgggg 1920
tttgtgtgtg agaggtagag aggcctcagc ttctcctggt ggggggtgctt tgcctgtgtt 1980
ccccagctca tgacccttct ccagttgtct tgttcccata taacatttga actctttaca 2040
cacctgaacc tgtggggggc ttgcccattt gaccatgtgg cccaggccaa agcccagtg 2100
tggccttacg catggtcggc aggagagtca gttgtgtgct ctgttgaagc cccacagagc 2160
aggtggttgc aatgctgcgg ttcgtgcaga agcggggaaa ctcaacggtg tacgagtgg 2220
ggacagggac agagccctct gtggtggaac gacccacct cgaggagctt cctgagcagg 2280
tggcagaaga tgcgattgac tggggcgact ttggggtaga ggcagtgtct gaggggactg 2340
actctggcat ctctgccgag gctgctggaa tgcactgggg catcttcccg gaatcagatt 2400
caaaggatcc tggaggtgat gggatagact ggggagacga tgctgttgct ttgcagatca 2460
cagtgttga agcaggaacc caggctccag aaggtgttgc cagggggcca gatgccctga 2520
cactgcttga atacactgag acccggaatc agttccttga tgagctcatg gagcttgaga 2580
tcttcttagc ccagagagca gtggagtga gtgaggaggc agatgtcctg tctgtgagcc 2640
agttccagct ggctccagcc atcctgcagg gccagaccaa agagaagatg gttaccatgg 2700
tgtcagtgtt ggaggatctg attggcaagc ttaccagtct tcagctgcaa cacctgttta 2760
tgatcctggc ctaccaagg tctggcttcc cttgatgca aggctctgcc atcttgagca 2820
gctctgcctc cttgtattcc tctcttgggt ccatgacccc ttaaacccca tccctgcctc 2880
ctggccattg ccattccact gggatagggg ttctctttgg gacaagaggg ggaggtttca 2940
catatacagg aagaatctgc ttgcttctct agtaggacag gggaaactggg agtgggtttt 3000
ccttaaaagg aaagggttta aggatgtgag ggtaagcggc cagttggggg tttgtttccc 3060
gagcctctca cctccccagc agctgaatgg gaatgctcag gatgcacagc taaccagca 3120
ctcacctgag tgccccgcac aggtatgtgg accgagtga tgaattcctc cagcaaaagc 3180
tgaagcagtc ccagctgctg gctttgaaga aagagctgat ggtgcagaag cagcaggagg 3240
cacttgagga gcaggcggct ctggagccta agctggacct gctactggag aagaccaagg 3300
agctgcagaa gctgattgaa gctgacatct ccaagaggta cagcgggcgc cctgtgaacc 3360
tgatgggaac ctctctgtga caccctccgt gttcttgctt gccatcttc tccgcttttg 3420
ggatgaagat gatagccagg gctgttgggt tggggccctt caaggcaaaa gaccaggctg 3480
actggaagat ggaaagccac aggaaggaag cggcacctga tggatgattt ggcactctcc 3540
atgttctcta caagaagctg tggtgattgg cctgtgggtc taccaggcga aaaccacaga 3600
ttctccttct agttagtata gcggacttaa taaaagagga aaaaactctt gcttcaaaaa 3660
aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaa 3693

```

<210> 40
 <211> 230
 <212> PRT
 <213> Homo sapiens

<400> 40
 Met Leu Arg Phe Val Gln Lys Arg Gly Asn Ser Thr Val Tyr Glu Trp
 1 5 10 15
 Arg Thr Gly Thr Glu Pro Ser Val Val Glu Arg Pro His Leu Glu Glu
 20 25 30
 Leu Pro Glu Gln Val Ala Glu Asp Ala Ile Asp Trp Gly Asp Phe Gly
 35 40 45
 Val Glu Ala Val Ser Glu Gly Thr Asp Ser Gly Ile Ser Ala Glu Ala
 50 55 60
 Ala Gly Ile Asp Trp Gly Ile Phe Pro Glu Ser Asp Ser Lys Asp Pro
 65 70 75 80
 Gly Gly Asp Gly Ile Asp Trp Gly Asp Asp Ala Val Ala Leu Gln Ile
 85 90 95

6069-74A.SEQ.txt

Thr Val Leu Glu Ala Gly Thr Gln Ala Pro Glu Gly Val Ala Arg Gly
 100 105 110
 Pro Asp Ala Leu Thr Leu Leu Glu Tyr Thr Glu Thr Arg Asn Gln Phe
 115 120 125
 Leu Asp Glu Leu Met Glu Leu Glu Ile Phe Leu Ala Gln Arg Ala Val
 130 135 140
 Glu Leu Ser Glu Glu Ala Asp Val Leu Ser Val Ser Gln Phe Gln Leu
 145 150 155 160
 Ala Pro Ala Ile Leu Gln Gly Gln Thr Lys Glu Lys Met Val Thr Met
 165 170 175
 Val Ser Val Leu Glu Asp Leu Ile Gly Lys Leu Thr Ser Leu Gln Leu
 180 185 190
 Gln His Leu Phe Met Ile Leu Ala Ser Pro Arg Ser Gly Phe Pro Leu
 195 200 205
 Met Gln Gly Ser Ala Ile Leu Ser Ser Ser Ala Ser Leu Tyr Ser Ser
 210 215 220
 Ser Cys Ser Met Thr Pro
 225 230

<210> 41

<211> 1701

<212> DNA

<213> Homo sapiens

<400> 41

```

cccttgagat gatttttctt tttcaacttc ttgaacttgg acatgaagga tgtgggcccc 60
gaatcatgtg gccagccccc cccctgttgg ccttcaccag ccttggagtc tgttctaggg 120
aaggcctccc agcatctggg actcgagagt gggcagcccc tctacctcct ggagctgaac 180
tggggtggaa ctgagtgtgt tcttagctct accgggagga cagctgcctg tttcctcccc 240
accagcctcc tccccacatc cccagctgcc tggctgggtc ctgaagccct ctgtctacct 300
gggagaccag ggaccacagg ccttagggat acaggggggtc cccttctgtt accaccccc 360
accctcctcc aggacaccac taggtgggtg tggatgcttg ttctttggcc agccaaggtt 420
cacggcgatt ctccccatgg gatcttgagg gaccaagctg ctgggattgg gaaggagttt 480
cacctgacc gttgccctag ccagggtccc aggaggcctc accatactcc ctttcagggc 540
cagggctcca gcaagcccag ggcaaggatc ctgtgctgct gtctggttga gagcctgcca 600
ccgtgtgtcg ggagtgtggg ccaggctgag tgcataagtg acagggccgt gagcatgggc 660
ctgggtgtgt gtgagctcag gcctaggtgc gcagtgtgga gacgggtgtt gtcgggggaa 720
aggtgtggct tcaaaagtgtg tgtgtgcagg ggggtgggtg gttagcgtgg gttaggggaa 780
cgtgtgtcgc cgtgtgtgtg ggcatgtgag atgagtgact gccggtgaat gtgtccacag 840
ttgagaggtt ggagcaggat gagggaaatc tgtcaccatc aataatcact tgtggagcgc 900
cagctctgcc caagacgcca cctgggcgga cagccaggag ctctccatgg ccaggctgcc 960
tgtgtgcatg ttccctgtct ggtgcccctt tgcccgcctc ctgcaaacct cacagggtcc 1020
ccacacaaca gtgccctcca gaagcagccc ctccggaggca gaggaaggaa aatggggatg 1080
gctggggctc tctccatcct ccttttctcc ttgccctcgc atggctggcc ttcccccca 1140
aaacctccat tcccctgtct ccagcccctt tgccatagcc tgattttggg gagggaggaa 1200
gggcgatttg agggagaagg ggagaaagct tatggctggg tctggtttct tcccttcca 1260
gagggtctta ctgttccagg gtggccccag ggcaggcagg ggccacacta tgcctgcgcc 1320
ctggtaaagg tgacctctgc cattaccag cagccctggc atgttctctg cccacaggaa 1380
tagaatggag ggagctccag aaactttcca tcccaaaggc agtctccgtg gttgaagcag 1440
actggatttt tgctctgccc ctgacccctt gtccctcttt gagggagggg agctatgcta 1500
ggactccaac ctcagggaat cgggtggcct gcgctagctt cttttgatac tgaaaaacttt 1560
taagggtggg ggggtggcaag ggatgtgctt aataaatcaa ttccaagcct caaaaaaaaa 1620
aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa 1680

```

aaaaaaaaa aaaaaaaaaa a

<210> 42
 <211> 240
 <212> PRT
 <213> Homo sapiens

<400> 42
 Met Lys Asp Val Gly Pro Glu Ser Cys Gly Gln Pro Thr Pro Cys Trp
 1 5 10 15
 Pro Ser Pro Ala Leu Glu Ser Val Leu Gly Lys Ala Ser Gln His Leu
 20 25 30
 Gly Leu Glu Ser Gly Gln Pro Leu Tyr Leu Leu Glu Leu Asn Trp Gly
 35 40 45
 Gly Thr Glu Cys Val Leu Ser Ser Thr Gly Arg Thr Ala Ala Cys Phe
 50 55 60
 Leu Pro Thr Ser Leu Leu Pro Thr Ser Pro Ala Ala Trp Leu Gly Pro
 65 70 75 80
 Glu Ala Leu Cys Leu Pro Gly Arg Pro Gly Thr Thr Gly Leu Arg Asp
 85 90 95
 Thr Gly Gly Pro Leu Leu Leu Pro Pro Pro Thr Leu Leu Gln Asp Thr
 100 105
 Thr Arg Trp Cys Trp Met Leu Val Leu Trp Pro Ala Lys Val His Gly
 115 120 125
 Asp Ser Pro His Gly Ile Leu Arg Asp Gln Ala Ala Gly Ile Gly Lys
 130 135 140
 Glu Phe His Pro Asp Arg Cys Pro Ser Gln Val Pro Arg Arg Pro His
 145 150 155 160
 His Thr Pro Phe Gln Gly Gln Gly Ser Ser Lys Pro Arg Ala Arg Ile
 165 170 175
 Leu Cys Cys Cys Leu Val Glu Ser Leu Pro Pro Cys Val Gly Ser Val
 180 185 190
 Gly Gln Ala Glu Cys Ile Gly Asp Arg Ala Val Ser Met Gly Leu Gly
 195 200 205
 Val Cys Glu Leu Arg Pro Arg Cys Ala Val Trp Arg Arg Val Leu Ser
 210 215 220
 Gly Lys Arg Cys Gly Phe Lys Val Cys Val Cys Arg Gly Trp Val Cys
 225 230 235 240

<210> 43
 <211> 1784
 <212> DNA
 <213> Homo sapiens

<400> 43
 aggtctagaa ttcaatcggg aatatctttt aagttttaaa aaaactggaa taattatatc 60
 tatctttttt gccgtttata tttaggggtt ttgttgata aaatcaagtc ttggttggtg 120
 cttgctgaat taaatattta tgagtgggtc atttttaagt atagtgaaca agacaccata 180

6069-74A.SEQ.txt

```

ttaagtacag tgataaagca tctatatctt gtaaaaaaaaaa aaaaaaatctg cctatgcatg 240
ttttttaaga aaaaaaaaaa ggctgtatcg gcctgtatgg gactgtaatg cgcttagtgg 300
tctgacatat actggaaatg tatgtatact ggcgtacttt atattctcta aaatgcttaa 360
tgcctttgaa attttgaat caaaaaaaaaa ctttgaaaaa tctaaagggg agagtattct 420
ttaaagtttt taacataagc ttgtcaatgc acatgtagat ggtagcatg tttagcaaac 480
cttgtgaaat tataataagt ttgtagttac atgtgaaact ctaaatgcat ggcaactgtt 540
aatgtcataa cagtttagtt attttgttct gttctgtcat gtgccacaaa atatgtactt 600
ttttcacttt tttccctttg tatatcagtt acgggttaca actggttcat tctgaaaaca 660
acaacaacaa aagtccattc atatttttta acaattgtat aagtgcccaa gtaattcact 720
acagcctaaa gccttgccct tgtaatttga cttctgacat gttggcaatc aaagcatgca 780
cttgtaacaa tgaaaaagaa aaagcatttt atattactac tcaataaaat gtgcatgaac 840
ttacagaatt ctcatccttc cactgagtcg gctgaaggga tttatgtgca caaccaccat 900
gtgtcttcta ggtgctggcc caccaccaca catcacaggc tgatttccac aggccttctt 960
ctaggggccc cgtgatctga ggggtggtgc ctacttccac tgtaagaaag aatcttggtg 1020
gatttgtgtc tcaaatcaga taagagaagc ctgtttaaag agcagatgcc atcttctggc 1080
ttcctcaagg agccagttaa aaaaccagag cattcctttt tattgaaaaa taaaattaat 1140
ttgttatcag gttgtttcag ttgtattgga tgccctatct atctgctaaa gcaaaaagta 1200
ctaggctact aagtgcattt tcatcacaga aaagagttgc atttgtatta acaagaaatt 1260
tgtataccca cgcttcagct actatctaata catcacccga agatttaaga tacaccaa 1320
ttcagtttgt ttgtaacatt gttcatcttt agtgcacttt gttttatata ataaagtatg 1380
cctgttatat taaataataa gaatatggca attagcgata tagcataccc aaacaaagat 1440
gttctcgata cagtctggca aagactatcc caagggtatt ttaatgaatt cagacatttt 1500
ttcctgtgga tatttctcca tcctaaaaaa agtggcaacc aaggaaaata tttagatgca 1560
acttactaga gtgatgatgt gaaagaaatg gtgattctgg tatcatgggtg tttattttct 1620
ttcttataac tgcagagaaa atatcctgac taaaaaaaat tcattttttt ggattccttt 1680
cttttataaa ttgtgctgag gcaactatgg catagaaata aacatttgac attaaaataa 1740
aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaa 1784

```

<210> 44
 <211> 82
 <212> PRT
 <213> Homo sapiens

<400> 44
 Met Cys His Lys Ile Cys Thr Phe Phe Thr Phe Phe Pro Leu Tyr Ile
 1 5 10 15
 Ser Tyr Gly Leu Gln Leu Val His Ser Glu Asn Asn Asn Asn Lys Ser
 20 25 30
 Pro Phe Ile Phe Phe Asn Asn Cys Ile Ser Ala Gln Val Ile His Tyr
 35 40 45
 Ser Leu Lys Pro Cys Leu Cys Asn Leu Thr Ser Asp Met Leu Ala Ile
 50 55 60
 Lys Ala Cys Thr Cys Asn Glu Lys Glu Lys Ala Phe Tyr Ile Thr
 65 70 75 80
 Thr Gln

<210> 45
 <211> 1034
 <212> DNA
 <213> Homo sapiens

<220>
 <221> unsure
 <222> (598)

<400> 45

6069-74A.SEQ.txt

```

ggaagatggc ggcctctggg gcgagagccgc aggtcctggt acaatacttg gtgttacgaa 60
aggatctatc acaagctccg ttctcctggc cgcggggagc actggttagc caggcttggtc 120
acgcggccac cgcggccttg cacactcacc gcgaccacc gcacacagcc gcttacctcc 180
aagagctggg ggcgatgcgc aaagtgggtc tcgaggcccc agatgagacc accctaaagg 240
agctggccga gaccctgcaa cagaagaaca ttgaccacat gctgtggctt gagcaaccag 300
agaatatcgc cacttgattt gctctccggc cctaccccaa ggaagaagtg ggccagtatt 360
tgaagaagtt ccgattgttc aagtaactgc tgctttgatg tgtttgaata cgcaggccac 420
ccattccaaa gcatcatgtg ttctttgcag tgctagcttg ctcccgtctt tcagttgtga 480
caatttcttg agggttaagc acatgttcat attaaagtgt tcattaataa ctacttcctc 540
ttattaataa gttcaagtgg ggaagggtgg agagcagtat tgtctgggga tcattgcnc 600
aatagaagat ttggtttagc tctcctgtgg ggctcaagga aactcccttc cagtcactcg 660
ggtttgaaac tttgcttttg aattccttct tattcacatc cagttatcat atttcattga 720
atccaagata acctcaactt caagatgcgg tagtatttta tgtattgtta aaaaatatgc 780
cggcaaatta aacacttgta ttccaataac aaagatgtta aaatttgagg agtggtgtgg 840
ctcacatctg ttaattccag ggttttggga agccaaggca ggaggatcgc ttgagcccat 900
gagttcaagg ttacagtcag ttctaatacag gccaccgcac tccagcgtgg gcaacagagt 960
gagacacggt ttctataaag attaataaca agttaaaaaa aaaaaaaaaa aaaaaaaaaa 1020
aaaaaaaaaa aaaa 1034

```

<210> 46
 <211> 126
 <212> PRT
 <213> Homo sapiens

<400> 46
 Met Ala Ala Ser Gly Ala Glu Pro Gln Val Leu Val Gln Tyr Leu Val
 1 5 10 15
 Leu Arg Lys Asp Leu Ser Gln Ala Pro Phe Ser Trp Pro Ala Gly Ala
 20 25 30
 Leu Val Ala Gln Ala Cys His Ala Ala Thr Ala Ala Leu His Thr His
 35 40 45
 Arg Asp His Pro His Thr Ala Ala Tyr Leu Gln Glu Leu Gly Arg Met
 50 55 60
 Arg Lys Val Val Leu Glu Ala Pro Asp Glu Thr Thr Leu Lys Glu Leu
 65 70 75 80
 Ala Glu Thr Leu Gln Gln Lys Asn Ile Asp His Met Leu Trp Leu Glu
 85 90 95
 Gln Pro Glu Asn Ile Ala Thr Cys Ile Ala Leu Arg Pro Tyr Pro Lys
 100 105 110
 Glu Glu Val Gly Gln Tyr Leu Lys Lys Phe Arg Leu Phe Lys
 115 120 125

<210> 47
 <211> 1626
 <212> DNA
 <213> Homo sapiens

<400> 47
 caacttggtg agctgaaggt ttgtttgtga cttattacag agcctgtgac ttaaaaaatcc 60
 ttcccacaac cacaagctaa agtgggagaa gacaaactac ctacaccttt caaccaagag 120
 ggaggagcaa aaatcagtgat acttttacag aagaacctgc cagcctgtga tgatcctacc 180
 aaagagaaac ctcaatgagt tatggaattt cctttttggt gaattgagtg ctgtttttgc 240
 ttttctcaga ttccaaatga gagtatacat ttttctttgt ttgatgtgct ggggtgagatc 300
 tgataataaa agaccatgcc ttgaattctc tcagctaagt gtaaaaggatt ccttcagaga 360
 tttattttatt ccgagaatag agaccattct gatgatgtat acaaggaaca acctaaactg 420

6069-74A.SEQ.txt

```

tgctgagcca ctgtttgaac aaaataactc acttaatggt aatttcaaca cacaaaagaa 480
aacagtctgg cttattcacg gatacagacc agtaggctcc atcccattat ggcttcagaa 540
cttcgtaagg attttgctga atgaagaaga tatgaatgta attgtagtag actggagccg 600
gggtgctaca acttttattt ataatagagc agttaaaaac accagaaaag ttgctgtgag 660
tttgagtgtg cacattaaaa atcttttgaa gcatgggtgca tctcttgaca attttcattt 720
cataggtgtg agtttagggg ctcatatcag tggatttggt ggaaagatat ttcattggtca 780
acttggaaga ataacagggtc ttgaccctgc tgggccaagg ttctccagaa aaccaccata 840
tagcagatta gattacacgg atgcaaagtt tgtggatgtc atccattctg actccaatgg 900
aattcaattc attaaatgca accaccagag agcagttcac ttgttcattg catctttaga 960
aacaaactgc aattttattt catttccttg tcgttcatac aaagattaca agactagctt 1020
atgtgtggac tgtgactggt ttaaggaaaa atcatgtcct cggctgggtt atcaagccaa 1080
gctattttaa ggtgttttaa aagaaaggat ggaaggaaga cctcttagga ccactgtggt 1140
tttgataaca agtgcctatt attttgttct cagtataatt gttccagata aaactatgat 1200
ggatggctcg ttttcattta aattattaaa tcagcttgga atgattgaag agccaaggct 1260
ttatgaagaa agataacata tgttaaagag gcacccttac tctaaacaac tagtgacttt 1320
aaaagtctta agcgtatcag gagatggaga ccacctctggc taacatggtg aaaccctgtc 1380
tctactaaaa attcagaaaa ttagctgggc atggtggcac gtgcctgtag tcccagctac 1440
tcaggaggct gaggcaagag aattgcttga acccaggagg tggagggtgc agtgagctga 1500
gattgcaccg ctgccctcca gcctgggtga cagagcaaga ctccatttca aataaataaa 1560
taataaataa aataaataaa taaataaata aataaataaa gttaaagagt aaaaaaaaaa 1620
aaaaaa

```

<210> 48

<211> 368

<212> PRT

<213> Homo sapiens

<400> 48

```

Met Ile Leu Pro Lys Arg Asn Leu Asn Glu Leu Trp Asn Phe Leu Phe
 1          5          10          15
Gly Glu Leu Ser Ala Val Phe Ala Phe Leu Arg Phe Gln Met Arg Val
          20          25          30
Tyr Ile Phe Leu Cys Leu Met Cys Trp Val Arg Ser Asp Asn Lys Arg
          35          40          45
Pro Cys Leu Glu Phe Ser Gln Leu Ser Val Lys Asp Ser Phe Arg Asp
          50          55          60
Leu Phe Ile Pro Arg Ile Glu Thr Ile Leu Met Met Tyr Thr Arg Asn
          65          70          75          80
Asn Leu Asn Cys Ala Glu Pro Leu Phe Glu Gln Asn Asn Ser Leu Asn
          85          90          95
Val Asn Phe Asn Thr Gln Lys Lys Thr Val Trp Leu Ile His Gly Tyr
          100          105          110
Arg Pro Val Gly Ser Ile Pro Leu Trp Leu Gln Asn Phe Val Arg Ile
          115          120          125
Leu Leu Asn Glu Glu Asp Met Asn Val Ile Val Val Asp Trp Ser Arg
          130          135          140
Gly Ala Thr Thr Phe Ile Tyr Asn Arg Ala Val Lys Asn Thr Arg Lys
          145          150          155          160
Val Ala Val Ser Leu Ser Val His Ile Lys Asn Leu Leu Lys His Gly
          165          170          175
Ala Ser Leu Asp Asn Phe His Phe Ile Gly Val Ser Leu Gly Ala His
          180          185          190

```

6069-74A.SEQ.txt

Ile Ser Gly Phe Val Gly Lys Ile Phe His Gly Gln Leu Gly Arg Ile
 195 200 205
 Thr Gly Leu Asp Pro Ala Gly Pro Arg Phe Ser Arg Lys Pro Pro Tyr
 210 215 220
 Ser Arg Leu Asp Tyr Thr Asp Ala Lys Phe Val Asp Val Ile His Ser
 225 230 235 240
 Asp Ser Asn Gly Ile Gln Phe Ile Lys Cys Asn His Gln Arg Ala Val
 245 250 255
 His Leu Phe Met Ala Ser Leu Glu Thr Asn Cys Asn Phe Ile Ser Phe
 260 265 270
 Pro Cys Arg Ser Tyr Lys Asp Tyr Lys Thr Ser Leu Cys Val Asp Cys
 275 280 285
 Asp Cys Phe Lys Glu Lys Ser Cys Pro Arg Leu Gly Tyr Gln Ala Lys
 290 295 300
 Leu Phe Lys Gly Val Leu Lys Glu Arg Met Glu Gly Arg Pro Leu Arg
 305 310 315 320
 Thr Thr Val Phe Leu Asp Thr Ser Ala Tyr Tyr Phe Val Leu Ser Ile
 325 330 335
 Ile Val Pro Asp Lys Thr Met Met Asp Gly Ser Phe Ser Phe Lys Leu
 340 345 350
 Leu Asn Gln Leu Gly Met Ile Glu Glu Pro Arg Leu Tyr Glu Glu Arg
 355 360 365

<210> 49

<211> 1221

<212> DNA

<213> Homo sapiens

<400> 49

```

ggaaaagctg agaataatca cctctgataa agatcacaga agctgccccg gaggtgtttg 60
attaaattca tgtattgaaa atattgttca gaccccatgt gacataactg gagccagtgc 120
agtgccatga agaactacga gattagcctg gatattaact tgtcttctag agaatagatt 180
tcatgttcca ttcttctgca atgggttaatt cacacagaaa accaatgttt aacattcaca 240
gaggatttta ctgcttaaca gccatcttgc cccaaatatg catttgttct cagttctcag 300
tgccatctag ttatcacttc actgaggatc ctggggcctt cccagtagcc actaatgggg 360
aacgatttcc ttggcaggag ctaaggctcc ccagtgtggt cattcctctc cattatgacc 420
tctttgtcca cccaatctc acctctctgg actttgttgc atctgagaag atcgaagtct 480
tggtcagcaa tgctacccag tttatcatct tgcacagcaa agatcttgaa atcacgaatg 540
ccacccitca gtcagaggaa gattcaagat acatgaaacc aggaaaagaa ctgaaagttt 600
tgagttaccc tgctcatgaa caaattgcac tgctggttcc agagaaactt acgcctcacc 660
tgaaatacta tgtggctatg gacttccaag ccaagttagg tgatggcttt gaagggtttt 720
ataaaagcac atacagaact cttggtggtg aaacaagaat tcttgcagta acagattttg 780
agccaacca ggcacgcatg gctttccctt gctttgatga accgttgttc aaagccaact 840
tttcaatcaa gatacgaaga gagagcaggc atattgcact atccaacatg ccaaagggtg 900
ccatctatgc atccccagac aaacggaatc aaacacatta tgctttgcag gcatcactga 960
agctacttga tttttatgaa aagtactttg atatctacta tccactctcc aaactgggta 1020
tgttcaaatt ccacattatt gtcttcattt ttgctcataa aacttgctta gatctcttcc 1080
ctctttctct ttgtatgtga tttaaatgag cactgaggaa ttcagttagc tcaggaaaaa 1140
ataatttgtt cctcagagat gattcttgag tgtagaaaat aaaatatatta tgacatgccc 1200
caaaaaaaaa aaaaaaaaaa a

```

6069-74A.SEQ.txt

<210> 50

<211> 305

<212> PRT

<213> Homo sapiens

<400> 50

```

Met Phe His Ser Ser Ala Met Val Asn Ser His Arg Lys Pro Met Phe
 1           5           10           15
Asn Ile His Arg Gly Phe Tyr Cys Leu Thr Ala Ile Leu Pro Gln Ile
          20           25           30
Cys Ile Cys Ser Gln Phe Ser Val Pro Ser Ser Tyr His Phe Thr Glu
          35           40           45
Asp Pro Gly Ala Phe Pro Val Ala Thr Asn Gly Glu Arg Phe Pro Trp
          50           55           60
Gln Glu Leu Arg Leu Pro Ser Val Val Ile Pro Leu His Tyr Asp Leu
 65           70           75           80
Phe Val His Pro Asn Leu Thr Ser Leu Asp Phe Val Ala Ser Glu Lys
          85           90           95
Ile Glu Val Leu Val Ser Asn Ala Thr Gln Phe Ile Ile Leu His Ser
          100          105          110
Lys Asp Leu Glu Ile Thr Asn Ala Thr Leu Gln Ser Glu Glu Asp Ser
          115          120          125
Arg Tyr Met Lys Pro Gly Lys Glu Leu Lys Val Leu Ser Tyr Pro Ala
          130          135          140
His Glu Gln Ile Ala Leu Leu Val Pro Glu Lys Leu Thr Pro His Leu
          145          150          155          160
Lys Tyr Tyr Val Ala Met Asp Phe Gln Ala Lys Leu Gly Asp Gly Phe
          165          170          175
Glu Gly Phe Tyr Lys Ser Thr Tyr Arg Thr Leu Gly Gly Glu Thr Arg
          180          185          190
Ile Leu Ala Val Thr Asp Phe Glu Pro Thr Gln Ala Arg Met Ala Phe
          195          200          205
Pro Cys Phe Asp Glu Pro Leu Phe Lys Ala Asn Phe Ser Ile Lys Ile
          210          215          220
Arg Arg Glu Ser Arg His Ile Ala Leu Ser Asn Met Pro Lys Val Ser
          225          230          235          240
Ile Tyr Ala Ser Pro Asp Lys Arg Asn Gln Thr His Tyr Ala Leu Gln
          245          250          255
Ala Ser Leu Lys Leu Leu Asp Phe Tyr Glu Lys Tyr Phe Asp Ile Tyr
          260          265          270
Tyr Pro Leu Ser Lys Leu Gly Met Phe Lys Phe His Ile Ile Val Phe
          275          280          285
Ile Phe Ala His Lys Thr Cys Leu Asp Leu Phe Pro Leu Ser Leu Cys
          290          295          300

```

6069-74A.SEQ.txt

Met
305

<210> 51
 <211> 951
 <212> DNA
 <213> Homo sapiens

```

<400> 51
ggtgggtgcg gagtctgcgg ccgttcccgc ggcctcctcc tcctccccgt tcccttcacc 60
cccaccccgcc acccctttcc ccatcccggc tccgtcacc tcccgtcccc cacactcagg 120
acaagaatgc cctgcccgga acaacccagc agcgccctaga tggctttggt cacggtccag 180
cggtcacctc cccccagcac caccctccag ccctgcgcct cggaggcaga cagtggggag 240
gaagaatgcc ggtcacagcc caggagcatc agcgagagct ttctaactgt caaagggtgt 300
gccctttttc taccacgggg aaatggctca tccacaccaa gaatcagcca cagacggaac 360
aagcatgcag gcgatctcca acagcatctc caagcaatgt tcattttact ccgcccagaa 420
gacaacatca ggctggctgt aagactggaa agtacttacc agaatcgaac acgctatatg 480
gtagtggttt caactaatgg tagacaagac actgaagaaa gcatcgtcct aggaatggat 540
ttctctctca atgacagcac ttgtaccatg ggcttagttt tgcctctctg gagcgacacg 600
ctaattcatt tggatgggtga tgggtgggttc agtgtatcga cggataacag agttcacata 660
ttcaaacctg tatctgtgca ggcaatgtgg gttgacaggg attcaaggaa caaacactgt 720
gatgtactat tggtggaaga atgaactgga gcagcctttc tggagagtga tttgccaata 780
tgccttatca ttttgcatga tctttgtcct agtaactcta tttctatgga tttactctaa 840
gtttgtaaac atggatgtgt gcaaagattt tagctctaag aatgtttgtc agtgttctaa 900
taatagcaaa aaataaaaaa caaatgattg aaaaataaaa aaaaaaaaaa a 951

```

<210> 52
 <211> 194
 <212> PRT
 <213> Homo sapiens

```

<400> 52
Met Ala Leu Val Thr Val Gln Arg Ser Pro Thr Pro Ser Thr Thr Ser
  1          5          10          15
Ser Pro Cys Ala Ser Glu Ala Asp Ser Gly Glu Glu Glu Cys Arg Ser
          20          25          30
Gln Pro Arg Ser Ile Ser Glu Ser Phe Leu Thr Val Lys Gly Ala Ala
          35          40          45
Leu Phe Leu Pro Arg Gly Asn Gly Ser Ser Thr Pro Arg Ile Ser His
          50          55          60
Arg Arg Asn Lys His Ala Gly Asp Leu Gln Gln His Leu Gln Ala Met
          65          70          75          80
Phe Ile Leu Leu Arg Pro Glu Asp Asn Ile Arg Leu Ala Val Arg Leu
          85          90          95
Glu Ser Thr Tyr Gln Asn Arg Thr Arg Tyr Met Val Val Val Ser Thr
          100          105          110
Asn Gly Arg Gln Asp Thr Glu Glu Ser Ile Val Leu Gly Met Asp Phe
          115          120          125
Ser Ser Asn Asp Ser Thr Cys Thr Met Gly Leu Val Leu Pro Leu Trp
          130          135          140
Ser Asp Thr Leu Ile His Leu Asp Gly Asp Gly Gly Phe Ser Val Ser
          145          150          155          160

```

6069-74A.SEQ.txt

Thr Asp Asn Arg Val His Ile Phe Lys Pro Val Ser Val Gln Ala Met
165 170 175

Trp Val Asp Arg Asp Ser Arg Asn Lys His Cys Asp Val Leu Leu Val
180 185 190

Glu Glu

<210> 53

<211> 1514

<212> DNA

<213> Homo sapiens

<400> 53

```

gcatgatatt tttacgggtc acccatattg catgtatcag gaatataatc ctttttatta 60
ttgagtagtg ttctattgta tgtatatacc acagtttatt tctcccttca tcctttgcta 120
gattttgggg ttttttcaca ttgcgctatt cagtataaac ctgctctcaa cattcatgtg 180
caagtccttt agtggacata tatttgcgtt tctcttgagt gaatgcacct tgttgggtca 240
cgtggcctaa cttaaaaaaa ttttaatacac tgtgggtgat atgtagtgat tattagtgat 300
tatctcataa ttttattttc ttgtttaatg atgttgagtg tatttcattt gtattttagt 360
ttgcaaagt ttgttcaaat tcttcacctg tttttaatga agacgtacga cttatttttg 420
tgttctgaac ataagttctt tgtcacataa aatgtgctat gaatgttgag ttttaaatac 480
tccaaatgaa tggctagaga attactattt gtagaaatat ttatatgtca aagggatgct 540
aacaatttac tttattgctc taaaatagaa aagttgccag aatgctgtgg agttttagt 600
gaaaacatga tagctggtgt tactgagtaa atttgagtgt taaatgtcaa tgtaagctaa 660
cggccaagat agggaccact gcagggtggt tacttgcagc tgtgactcaa ctggctcttc 720
actgccaaac atacctgggg ttggatcatt ggcctgacgt ttgcaaattg aggaacctta 780
gggcaaataca gtgaacttct gaactgcctt cgtcttcagt tatatgggga tttccccact 840
tttgagatcc ttgtaaggat tatatgagat gaagagatga gacaaggat ataaaaagtcc 900
tagcacagag cgtgtcatat aatatggctt cacaagtacc ctcatctcct ttccagtcgt 960
tttttgtttt tgtttttgtt tttttgagac catctcactc tgttgcccag gctggagtgc 1020
ctcttcattt ttatttcitt attcagcaag tattgatcaa atgtgctttg taccaggtac 1080
tgagctcttc gttgggatat aatggtgatc aaggagattg tagattctgg cagggaaaac 1140
tgacatcaaa cacggcgacc cgacatagtg agaccctgtc tctactagaa gaactttaaa 1200
aatcacctag gtgtgggccg ggcacggtgg ctaacgcctg tgggtcccagc actttgggat 1260
gctgaggcgg gtggatcacg gggtcaggag atcgagacca tcctggataa cacggagaaa 1320
ccccgtctct actggaaata caaggaaaatt ggccgggctg gggggcgggc atctgtggtc 1380
ccaattactc gggaggctgc agcaggagag tggcatgaac ccgggaggcg gatcttgcac 1440
tgagccgaga tcacgccact gcactccagc ctgggcgaca gaatgagact ccatctcaaa 1500
aaaaaaaaaa aaaa 1514

```

<210> 54

<211> 91

<212> PRT

<213> Homo sapiens

<400> 54

Met Ala Ser Gln Val Pro Ser Ser Pro Phe Gln Ser Phe Phe Val Phe
1 5 10 15

Val Phe Val Phe Leu Arg Pro Ser His Ser Val Ala Gln Ala Gly Val
20 25 30

Pro Leu His Phe Tyr Phe Phe Ile Gln Gln Val Leu Ile Lys Cys Ala
35 40 45

Leu Tyr Gln Val Leu Ser Ser Ser Leu Gly Tyr Asn Gly Asp Gln Gly
50 55 60

Asp Cys Arg Phe Trp Gln Gly Lys Leu Thr Ser Asn Thr Ala Thr Arg
65 70 75 80

6069-74A.SEQ.txt

His Ser Glu Thr Leu Ser Leu Leu Glu Glu Leu
85 90

<210> 55
<211> 1417
<212> DNA
<213> Homo sapiens

<400> 55
gtccaaatcc tattgtccac agtcagactt ctacaacctc ctctgaacaa atgcagcctc 60
caatgtttca ctctcaaagt accattgctg tgttacaggg ctcttcagtt cctcaagacc 120
agcagtcaac caacatattt ctttcccaga gtcccataaa taatcttcag actaacacag 180
tagcccaaga agcatttttt gcagcaccga actcaatttc tccacttcag tcaacatcaa 240
acagtgaaca acaagctgct ttccaacagc aagctccaat atcacacatc cagactccta 300
tgctttccca agaacaggca caacccccgc agcagggttt atttcagcct cagggtggccc 360
tgggctccct tccacctaatt ccaatgcctc aaagccaaca aggaaccatg ttccagtcac 420
agcactcaat agttgccatg cagagtaact ctccatccca ggaacagcag cagcagcagc 480
aacagcagca gcaacagcag cagcaacaac aacagagcat tttattcagt aatcagaata 540
ccatggctac aatggcgtct ccaaagcaac caccacaaa catgatattc aacccaaatc 600
aaaatccaat ggctaatacag gagcaacaga accagtcaat ttttcaccaa caaagtaaca 660
tggccccaat gaatcaagag caacagccca tgcaatttca gagtcagtcc acagtttctt 720
cacttcagaa cccaggtcct acccagtcgg aatcatcaca gacccccctg ttccatagct 780
ctcctcagat tcagttggta caagggtcac ctagtcttca agagcagcaa gtaactctct 840
tcttatctcc agcatccatg tctgccttgc agaccagtat aaatcaacaa gatatgcaac 900
agtctcctct ttattccccct cagaacaaca tgcctggaat tcaaggagcc acattttcgc 960
ctcaaccaca ggctacttta tttcacaaca cagcaggagg cacaatgaac caactgcaga 1020
attctcctgg ctcatctcag cagacatcag gaatgttctt atttggcatt caaaataact 1080
gtagtcagct ttttaacctt ggaccagcta cattgcctga tcagttgatg gccataagtc 1140
agccaggcca accacaaaac gagggccagc cacctgtgac aacacttctt tctcagcaaa 1200
tgccagagaa ttctccactg gcacccctta taaacaccaa ccagaacatc gaaaagattg 1260
atttgcttgt ttcatggcaa aaccaaggga acaacttgac tggctccttt taactggata 1320
taaattccac gaagaaaatc ctgattccaa gatgtcctga gatcttgtgg ttccatgaga 1380
attattactt taaaaacaaa acaaaaaaaaa aaaaaaa 1417

<210> 56
<211> 420
<212> PRT
<213> Homo sapiens

<400> 56
Met Gln Pro Pro Met Phe His Ser Gln Ser Thr Ile Ala Val Leu Gln
1 5 10 15
Gly Ser Ser Val Pro Gln Asp Gln Gln Ser Thr Asn Ile Phe Leu Ser
20 25 30
Gln Ser Pro Met Asn Asn Leu Gln Thr Asn Thr Val Ala Gln Glu Ala
35 40 45
Phe Phe Ala Ala Pro Asn Ser Ile Ser Pro Leu Gln Ser Thr Ser Asn
50 55 60
Ser Glu Gln Gln Ala Ala Phe Gln Gln Gln Ala Pro Ile Ser His Ile
65 70 75 80
Gln Thr Pro Met Leu Ser Gln Glu Gln Ala Gln Pro Pro Gln Gln Gly
85 90 95
Leu Phe Gln Pro Gln Val Ala Leu Gly Ser Leu Pro Pro Asn Pro Met
100 105 110

6069-74A.SEQ.txt

Pro Gln Ser Gln Gln Gly Thr Met Phe Gln Ser Gln His Ser Ile Val
 115 120 125
 Ala Met Gln Ser Asn Ser Pro Ser Gln Glu Gln Gln Gln Gln Gln
 130 135 140
 Gln Gln Gln Gln Gln Gln Gln Gln Gln Gln Ser Ile Leu Phe Ser
 145 150 155 160
 Asn Gln Asn Thr Met Ala Thr Met Ala Ser Pro Lys Gln Pro Pro Pro
 165 170 175
 Asn Met Ile Phe Asn Pro Asn Gln Asn Pro Met Ala Asn Gln Glu Gln
 180 185 190
 Gln Asn Gln Ser Ile Phe His Gln Gln Ser Asn Met Ala Pro Met Asn
 195 200 205
 Gln Glu Gln Gln Pro Met Gln Phe Gln Ser Gln Ser Thr Val Ser Ser
 210 215 220
 Leu Gln Asn Pro Gly Pro Thr Gln Ser Glu Ser Ser Gln Thr Pro Leu
 225 230 235 240
 Phe His Ser Ser Pro Gln Ile Gln Leu Val Gln Gly Ser Pro Ser Ser
 245 250 255
 Gln Glu Gln Gln Val Thr Leu Phe Leu Ser Pro Ala Ser Met Ser Ala
 260 265 270
 Leu Gln Thr Ser Ile Asn Gln Gln Asp Met Gln Gln Ser Pro Leu Tyr
 275 280 285
 Ser Pro Gln Asn Asn Met Pro Gly Ile Gln Gly Ala Thr Phe Ser Pro
 290 295 300
 Gln Pro Gln Ala Thr Leu Phe His Asn Thr Ala Gly Gly Thr Met Asn
 305 310 315 320
 Gln Leu Gln Asn Ser Pro Gly Ser Ser Gln Gln Thr Ser Gly Met Phe
 325 330 335
 Leu Phe Gly Ile Gln Asn Asn Cys Ser Gln Leu Leu Thr Ser Gly Pro
 340 345 350
 Ala Thr Leu Pro Asp Gln Leu Met Ala Ile Ser Gln Pro Gly Gln Pro
 355 360 365
 Gln Asn Glu Gly Gln Pro Pro Val Thr Thr Leu Leu Ser Gln Gln Met
 370 375 380
 Pro Glu Asn Ser Pro Leu Ala Ser Ser Ile Asn Thr Asn Gln Asn Ile
 385 390 395 400
 Glu Lys Ile Asp Leu Leu Val Ser Leu Gln Asn Gln Gly Asn Asn Leu
 405 410 415
 Thr Gly Ser Phe
 420

<210> 57

<211> 2297

6069-74A.SEQ.txt

<212> DNA
<213> Homo sapiens

<400> 57

```

gaagtgaggg ttgaatgatt cccacttaac taaaaaatga ataagcgtag ttgaaatgat 60
tttttaaagt gtttggtagt ctatacttat gttctttctt tgtttccact atagacagta 120
ttcgtggcta ctttggggaa acaattgctc tgtacttttg atttttggag tatttcactt 180
ttgcattaat ccccatggct gtcattgggt taccttacta cttgtttggt tgggaagact 240
atgacaagta cgtgatcttt gcctcgttca acctcatctg gtccacggtg attctggaac 300
tgtggaagcg tggctgtgcc aacatgacct acaggtgggg gacactgctc atgaagagaa 360
agtttgagga gccccggcca ggatttcatg gtgtcttggg tatcaattcc atcactggga 420
aggaggagcc tctgtacccc agctacaaga gacagttgct catttacctg gtctccctgc 480
cattcgtgtg cctctgcctc tatttctcac tgtatgtcat gatgatttac ttcgacatgg 540
aggtttgggc cttgggtcta catgagaaca gcgggtctga gtggaccagt gtcctgttgt 600
atgtgcccag catcatctat gccattgtga ttgagatcat gaatcgctc tatcgatatg 660
ctgccgagtt tttaacttca tgggagaatc acagattgga atctgcctat cagaaccatc 720
taattctgaa agtttttagt ttcaacttcc tcaattgctt tgccctcactc ttctatatgt 780
cctttgtctt gaaagatatg aagcttttgc gccagagctt ggccactctc ctaattacct 840
cccagatcct caaccaaat atggaatctt ttcttctcta ttggctccaa aggaagcatg 900
gtgtgcagggt gaagaggaag gtgcaggctt taaaggcaga cattgatgct acattatatg 960
aacaagtcatt cctggaaaaa gaaatgggaa cttatttggg cacttttgat gattacttgg 1020
agttattcct gcagtttgggt tatgtgagcc ttttctcctg tgtttacca ttagcagctg 1080
cctttgctgt gttaaataac ttcactgaag taaattcaga tgccctaaaa atgtgcaggg 1140
tcttcaaacg tccatttcta gaaccttcag ccaatatttg tgtgtggcag atgatatttt 1200
gtttggacac aggtgtaaag agagggtctg attgcaaggt catgaggaat cttttggggg 1260
aaatggaaat gtcctgtgtc ttgtttgtgt tgggtgggtg ttcacaggta aatacaccta 1320
tcaaaaggta atgaagtata taccttaaat gcatgcagtt tattgtatgt aaattataac 1380
tcaatatagg tgattttaaa aaaaacctga aagtttagtt acaaacatat tgcaagttca 1440
ggaagccagg cactgtcata tgctgtcgtt ggaagcatga gctgggtcaac ccatggagtg 1500
cagcttcgta tttatctatc aaaattacaa atgcatgtcc cctttgactc agccatttca 1560
ctttccagaa tttagcctaa tccacattt gttaaattgat gtacttataa gatcaccaat 1620
tgtagcactg tttgtaatat caactaaatg cccaccaata agaaaatggg tacataaatt 1680
ctgatacgtc catgtaataa aatgcagaag cagtgtggca aagaatgagg gagctctttt 1740
agtattgaca cagaaagtc ctcaagacac tttaaattgac taaagcaagg ggcctgacag 1800
tatgtagtat gctgaaaagg gagtaggaaa gagtgatat atccaatatg cttattttgc 1860
atacaaaactg tctggaagaa tacataagaa attgcaaata gtggttgtct tctagggaga 1920
atgggagctg cgaagtggaa gaaaagggga caagggaata agacactctt cactatgtac 1980
ttagaatttt ttatttttaa gccatgagaa tataatcaaa agtaaataaa tagaaatttt 2040
aaactaaagt aaagacagtc ttagatttct tatgaagaaa actgtggaaa aataatcaga 2100
ctacacaaag atttctaaat tgtaagatgg cagaagttct ccatgggaca aaatgtattc 2160
atattaagtt tggattcagt catcttttgt tttgcttctt ttaaaattaa tgtttcta 2220
agtacttgtg tttcttggaa ttaatgggta aattattaag tggatgacac catatacttt 2280
gtaaaaaaaa aaaaaaa 2297

```

<210> 58
<211> 378
<212> PRT
<213> Homo sapiens

<400> 58

```

Met Ala Val Ile Gly Leu Pro Tyr Tyr Leu Phe Val Trp Glu Asp Tyr
 1           5           10           15
Asp Lys Tyr Val Ile Phe Ala Ser Phe Asn Leu Ile Trp Ser Thr Val
          20           25           30
Ile Leu Glu Leu Trp Lys Arg Gly Cys Ala Asn Met Thr Tyr Arg Trp
          35           40           45
Gly Thr Leu Leu Met Lys Arg Lys Phe Glu Glu Pro Arg Pro Gly Phe
          50           55           60
His Gly Val Leu Gly Ile Asn Ser Ile Thr Gly Lys Glu Glu Pro Leu

```

6069-74A.SEQ.txt

```

65              70              75              80
Tyr Pro Ser Tyr Lys Arg Gln Leu Arg Ile Tyr Leu Val Ser Leu Pro
85              90              95
Phe Val Cys Leu Cys Leu Tyr Phe Ser Leu Tyr Val Met Met Ile Tyr
100             105             110
Phe Asp Met Glu Val Trp Ala Leu Gly Leu His Glu Asn Ser Gly Ser
115             120             125
Glu Trp Thr Ser Val Leu Leu Tyr Val Pro Ser Ile Ile Tyr Ala Ile
130             135             140
Val Ile Glu Ile Met Asn Arg Leu Tyr Arg Tyr Ala Ala Glu Phe Leu
145             150             155
Thr Ser Trp Glu Asn His Arg Leu Glu Ser Ala Tyr Gln Asn His Leu
165             170             175
Ile Leu Lys Val Leu Val Phe Asn Phe Leu Asn Cys Phe Ala Ser Leu
180             185             190
Phe Tyr Ile Ala Phe Val Leu Lys Asp Met Lys Leu Leu Arg Gln Ser
195             200             205
Leu Ala Thr Leu Leu Ile Thr Ser Gln Ile Leu Asn Gln Ile Met Glu
210             215             220
Ser Phe Leu Pro Tyr Trp Leu Gln Arg Lys His Gly Val Gln Val Lys
225             230             235
Arg Lys Val Gln Ala Leu Lys Ala Asp Ile Asp Ala Thr Leu Tyr Glu
245             250             255
Gln Val Ile Leu Glu Lys Glu Met Gly Thr Tyr Leu Gly Thr Phe Asp
260             265             270
Asp Tyr Leu Glu Leu Phe Leu Gln Phe Gly Tyr Val Ser Leu Phe Ser
275             280             285
Cys Val Tyr Pro Leu Ala Ala Ala Phe Ala Val Leu Asn Asn Phe Thr
290             295             300
Glu Val Asn Ser Asp Ala Leu Lys Met Cys Arg Val Phe Lys Arg Pro
305             310             315
Phe Ser Glu Pro Ser Ala Asn Ile Gly Val Trp Gln Met Ile Phe Cys
325             330             335
Leu Asp Thr Gly Val Lys Arg Gly Leu Asn Cys Lys Val Met Arg Asn
340             345             350
Leu Leu Gly Glu Met Glu Met Ser Cys Val Leu Phe Val Val Val Val
355             360             365
Val Ser Gln Val Asn Thr Pro Ile Lys Arg
370             375

```

<210> 59
 <211> 4145
 <212> DNA

<213> Homo sapiens

<400> 59

```

aggtctagaa ttcaagatga agtaaagaag gaaagagagg gtctggagaa tgacttgaaa 60
tctgtgaatt ttgacatgac aagcaagttt ttgacagccc tggctcaaga tgggtgtgata 120
aatgaagaag ctcttttctgt tactgaacta gatcgagttt atggagggtct tacaactaaa 180
gtccaagaat ctctaaagaa acaggaggga ctctttaaaa atattcagggt ctacatcag 240
gaattttcaa aaatgaaaca atctaataat gaagctaact taagagaaga agttttgaag 300
aatttagcta ctgcatatga caactttgtt gaactttagt ctaatttgaa ggaaggcaca 360
aagttttaca atgagttgac tgaatcctg gtcagggttc agaacaaatg cagtgatata 420
gtttttgcac ggaagacaga aagagatgaa ctcttaaagg acttgcaaca aagcattgcc 480
agagaacctt gtgtctcttc aattcctaca cctgcgtatc agtcctcacc agcaggagga 540
catgcaccaa ctcttccaac tccagcgcca agaaccatgc cgcctactaa gccccagccc 600
ccaggcaggc ctccaccacc tgtgcttcca gcaaatcgag ctcttctgc tactgctcca 660
tctccagttg gggctgggac tgtgctgcca gctccatcac aaacgcctgg ctgagctcct 720
cctccacagg cgcagggacc accctatccc acctatccag gatatcctgg gtattgcca 780
atgcccctgc ccatgggcta taatccttat gcgtatggcc agtataatat gccatatcca 840
ccagtgtatc accagagttc tggacagggt ccataccggg gaccccagca gccttcatac 900
cccttccctc agccccaca gcagctctac tatccacagc agtaatatgt ctgctcagca 960
gtcagcttga ttcagatcag agggaaagaa ataccaacc tgcaataagt gtactaaact 1020
ctacgctctg gttaattgaa tgtactctcc tggactgaat gcagtgtata atttctgtct 1080
acagctagaa gctgtgcccc agttccacat ttgattacac atgtgagatt tgctgctgtt 1140
gcagtataaa cactaggtat aataggattt gaaattgcat tacagttcat aaaaattgaa 1200
aatgagaaat taaacctgca agtgaaacat ttgaaacgat tatactttc tacataagac 1260
atggttggga catcagatc ttacaaagat gggttaagta tggatactag agaaaattaa 1320
gttttctttc tctttggttt attgatttgg ttaattttcc attatgctat ttgcataat 1380
caaggcactg taaatcttat aattttaaaa taaattactt aagaacagtt gtcattgtta 1440
tgttttgtta ttgattctca ttactgtcta attttttttc tggatttagt ctcatctgtt 1500
atgtatataa gttaaacaga tactgttttt aagtgcattg atagtacaag ttattatcaa 1560
ggatgtttta cagggaatc aaaagaatat tatcatactt tatctttcgt atgctgatta 1620
gtaaacgatt ttgacatttt attttagaaa gtcctataat gtggaagaaa caaacagttg 1680
ctaccaaaag ttttcaaatt aaacatacaa ataatgtgt atatttaattg ttttattgtt 1740
agcttctcca gaaaattgat gcaaattctg gtaataattc ttgcattttt tccccataac 1800
ctgggttaaaa taaatacgcc attggcaata ctccataatg taatggaatt gtttggggaa 1860
cacttactgt accctctcat cctttttcca cttactgtg ttaacttagt gacattta 1920
gccaatattg tatgaataga tctaagccat ttaatttttt ttccttaaaa gattggagta 1980
ttttataatt caaggagcat acaaaacaat gggtgggaac atatgccaat tatggaatag 2040
gctatgtatt taattattaat ctctgccatt aggatattcta ctactgtat aaacctcagt 2100
aaaaatagtg aagacatgca tcatggaatg agaaaatgag aaaggaatga gttgtctaac 2160
atcacagtgg gatctgtttt ttgtgagggt catttctgaa cacattaggc atatgagcag 2220
atttccagtg aatctattta tgtttatttt ctgagtttca acgctgacct tttcttgcat 2280
tattgtttta ttttaattat agtgttactt gtcccactgt tgttttcatt gaggttggat 2340
ttatatttta atgttcgaat gaaagtatga ttgttaaaag gaggtaattg gtttaaaaat 2400
atatgtatat tttaaacttt gttgtgtgta ggaacatga aggcattgta attcaatata 2460
aatgaccttt gatttcatgg aatattaaag ttggtttaaa gtccaatagt taaaccttag 2520
caaaaatagc tttttacttc atcagttgct aagatttaat actttggatt catcaaagtg 2580
tgacatgggc ttgtttgact ttctgtaagt ggcatttaag ttccacattc ttattacttg 2640
aggtacttta tactaacata agacagtga agtttagagg attacaagtt gctagtttat 2700
aatgtcttac taatgcagaa acaaggaaaa aagcaaaaatt ggcctgaata ttctcttggg 2760
gaaagagggc accaaagaaa agggtaagt catctgagg ccaaaagaga tgtataagcc 2820
ttttagccca ttccccatgc tgggcctgct cacagagcca caggagatc attcagaaac 2880
taggaaagga gggccccaca gctgatcctg ccacagcaca cctgactcac tcggctctgt 2940
tagtgtaacc ttttaaatgt agcaacacaa accctttccc tcttgctcag tcaactcatc 3000
tttggtttct ttttaatcac ctgtgtctgg gcacagacaa tcacaataaa tgcagccctt 3060
tattactgtt aaggatcata ctgttgggtt ggagttggaa ggggtactact ctgtgattca 3120
gggtgtgtgt acccatattt ataattaggc ttattattct tcctaaatca aggaaaggaa 3180
atcatcccca gaccatttat gctgagcttt ggaatactat tttaaactgg attgtactta 3240
aataatgaag ctctgcatag aggaactagt cagaagtgg gaaaacactg tctaattttt 3300
atcagtctgg tataaagtat tgatctaaga gaactctccc tgtgccccctt ggtctttatt 3360
ctcaattaag aaaaacagtc acatgtcacg acaaaccaat caatctttat gagatattcc 3420
tgtatccata ccccagcttg tttgcaattt ataaacctcc cttcaaaac taaggagttg 3480
cagaaaaaaa tggatttcac agagccttgt gtcccataag ttctgtccca gtcagcagtc 3540
tttatagtcc aaacagatta taaaaaatgt tttccatttg aactttacag tttgcaaaag 3600

```

6069-74A.SEQ.txt

```

tgcttttata cattttctaa tttcagaaac aggataattt gtttaagtggg tttcagtttg 3660
ctaataggga ttttttgtgt tttgtttttt aatttttcagc atctcttgaa gaatcttgct 3720
acagccaaat ggcattctac ttttttaaaga cgtttgcaat tattagttaga ttcacagtac 3780
agaacaaggt ataaaggaaa aaaccctgct aggtagtgtt ataattgcta gattaaaaat 3840
agactagaac aggttcattt taagattttac ttggaagagc aaagaaggaa aaattatatt 3900
tttaaagaaa gagaatattc aggcatttatt tctggtatga agtttatatt ttttaaaaaa 3960
atcctatatt atcacaccag agatttttaga ttcttttctg gttagaaaca ttgctggtag 4020
ttggattata tttttattgt attcattttat cttaggggga acattgtaaa gaaacaaaaa 4080
ggtcagatg aatgtatgct agaaataaaa gttgaaagat tcttacttca aaaaaaaaaa 4140
aaaaa 4145

```

<210> 60
 <211> 289
 <212> PRT
 <213> Homo sapiens

<400> 60

```

Met Thr Ser Lys Phe Leu Thr Ala Leu Ala Gln Asp Gly Val Ile Asn
  1           5           10           15
Glu Glu Ala Leu Ser Val Thr Glu Leu Asp Arg Val Tyr Gly Gly Leu
          20           25           30
Thr Thr Lys Val Gln Glu Ser Leu Lys Lys Gln Glu Gly Leu Leu Lys
        35           40           45
Asn Ile Gln Val Ser His Gln Glu Phe Ser Lys Met Lys Gln Ser Asn
        50           55           60
Asn Glu Ala Asn Leu Arg Glu Glu Val Leu Lys Asn Leu Ala Thr Ala
        65           70           75           80
Tyr Asp Asn Phe Val Glu Leu Val Ala Asn Leu Lys Glu Gly Thr Lys
          85           90           95
Phe Tyr Asn Glu Leu Thr Glu Ile Leu Val Arg Phe Gln Asn Lys Cys
        100           105           110
Ser Asp Ile Val Phe Ala Arg Lys Thr Glu Arg Asp Glu Leu Leu Lys
        115           120           125
Asp Leu Gln Gln Ser Ile Ala Arg Glu Pro Ser Ala Pro Ser Ile Pro
        130           135           140
Thr Pro Ala Tyr Gln Ser Ser Pro Ala Gly Gly His Ala Pro Thr Pro
        145           150           155           160
Pro Thr Pro Ala Pro Arg Thr Met Pro Pro Thr Lys Pro Gln Pro Pro
          165           170           175
Ala Arg Pro Pro Pro Pro Val Leu Pro Ala Asn Arg Ala Pro Ser Ala
          180           185           190
Thr Ala Pro Ser Pro Val Gly Ala Gly Thr Ala Ala Pro Ala Pro Ser
          195           200           205
Gln Thr Pro Gly Ser Ala Pro Pro Pro Gln Ala Gln Gly Pro Pro Tyr
        210           215           220
Pro Thr Tyr Pro Gly Tyr Pro Gly Tyr Cys Gln Met Pro Met Pro Met
        225           230           235           240
Gly Tyr Asn Pro Tyr Ala Tyr Gly Gln Tyr Asn Met Pro Tyr Pro Pro

```

245

250

255

Val Tyr His Gln Ser Pro Gly Gln Ala Pro Tyr Pro Gly Pro Gln Gln
 260 265 270

Pro Ser Tyr Pro Phe Pro Gln Pro Gln Gln Ser Tyr Tyr Pro Gln
 275 280 285

Gln

<210> 61
 <211> 1417
 <212> DNA
 <213> Homo sapiens

<400> 61
 ggtgcccagac atggcgagtg tagtgctgcc gagcggatcc cagtgtgcgg cggcagcggc 60
 ggcggcgggc cctcccgggc tccggctccg gcttctgctg ttgctcttct ccgccgcggc 120
 actgatcccc acaggatgat ggcagaatct gtttacgaaa gacgtgacag tgatcgaggg 180
 agaggttgcg accatcagtt gccaaagtcaa taagagtgc gactctgtga ttcagctact 240
 gaatcccaac aggcagacca tttatttcag ggacttcagg cttttgaagg acagcagggt 300
 tcagttgctg aatttttcta gcagtgaaact caaagtatca ttgacaaacg tctcaatttc 360
 tgatgaagga agatactttt gccagctcta taccgatccc ccacaggaaa gttacaccac 420
 catcacagtc ctggttcccac cagctaattct gatgatcgat atccagaaaag acactgcggg 480
 ggaaggtgag gagattgaag tcaactgcac tgctatggcc agcaagccag ccacgactat 540
 caggtgggtc aaagggaaca cagagctaaa aggcaaatcg gaggtggaag agtgggtcaga 600
 catgtacact gtgaccagtc agctgatgct gaaggtgcac aaggaggacg atgggggtccc 660
 agtgatctgc caggtggagc accctgcggg cactggaaac ctgcagaccc agcgggtatct 720
 agaagtacag tataagcctc aagtgcacat tcagatgact tatcctctac aaggcttaac 780
 ccgggaaggg gacgcgcttg agttaacatg tgaagccatc gggaagcccc agcctgtgat 840
 ggtaacttgg gtgagagtcg atgatgaaat gcctcaacac gccgtactgt ctgggcccac 900
 cctgttcac aataacctaa acaaaacaga taatggtaca taccgctgtg aagcttcaaa 960
 catagtgggg aaagctcact cggattatat gctgtatgta tacgattccc gagcagggtga 1020
 agaaggctcg atcagggcag tggatcatgc cgtgatcggg ggcgtcgtgg cgggtgggtgt 1080
 gttcgccatg ctgtgcttgc tcatcattct ggggcgctat ttgcccagac ataaagggtac 1140
 ataccttcaat catgaagcca aaggagccga tgacgcagca gacgcagaca cagctataat 1200
 caatgcagaa ggaggacaga acaactccga agaaaagaaa gagtacttca tctagatcag 1260
 cctttttgtt tcaatgaggt gtccaactgg ccctatttag atgataaaga gacagtgata 1320
 ttggaacttg cgagaaattc gtgtgttttt ttatgaatgg gtggaaaagg gtgagactgg 1380
 gaaggcttgg gatttgctgt gtaaaaaaaaa aaaaaaaa 1417

<210> 62
 <211> 414
 <212> PRT
 <213> Homo sapiens

<400> 62
 Met Ala Ser Val Val Leu Pro Ser Gly Ser Gln Cys Ala Ala Ala Ala
 1 5 10 15
 Ala Ala Ala Ala Pro Pro Gly Leu Arg Leu Arg Leu Leu Leu Leu
 20 25 30
 Phe Ser Ala Ala Ala Leu Ile Pro Thr Gly Asp Gly Gln Asn Leu Phe
 35 40 45
 Thr Lys Asp Val Thr Val Ile Glu Gly Glu Val Ala Thr Ile Ser Cys
 50 55 60
 Gln Val Asn Lys Ser Asp Asp Ser Val Ile Gln Leu Leu Asn Pro Asn
 65 70 75 80

6069-74A.SEQ.txt

Arg Gln Thr Ile Tyr Phe Arg Asp Phe Arg Pro Leu Lys Asp Ser Arg
 85 90 95
 Phe Gln Leu Leu Asn Phe Ser Ser Ser Glu Leu Lys Val Ser Leu Thr
 100 105 110
 Asn Val Ser Ile Ser Asp Glu Gly Arg Tyr Phe Cys Gln Leu Tyr Thr
 115 120 125
 Asp Pro Pro Gln Glu Ser Tyr Thr Thr Ile Thr Val Leu Val Pro Pro
 130 135 140
 Arg Asn Leu Met Ile Asp Ile Gln Lys Asp Thr Ala Val Glu Gly Glu
 145 150 155 160
 Glu Ile Glu Val Asn Cys Thr Ala Met Ala Ser Lys Pro Ala Thr Thr
 165 170 175
 Ile Arg Trp Phe Lys Gly Asn Thr Glu Leu Lys Gly Lys Ser Glu Val
 180 185 190
 Glu Glu Trp Ser Asp Met Tyr Thr Val Thr Ser Gln Leu Met Leu Lys
 195 200 205
 Val His Lys Glu Asp Asp Gly Val Pro Val Ile Cys Gln Val Glu His
 210 215 220
 Pro Ala Val Thr Gly Asn Leu Gln Thr Gln Arg Tyr Leu Glu Val Gln
 225 230 235 240
 Tyr Lys Pro Gln Val His Ile Gln Met Thr Tyr Pro Leu Gln Gly Leu
 245 250 255
 Thr Arg Glu Gly Asp Ala Leu Glu Leu Thr Cys Glu Ala Ile Gly Lys
 260 265 270
 Pro Gln Pro Val Met Val Thr Trp Val Arg Val Asp Asp Glu Met Pro
 275 280 285
 Gln His Ala Val Leu Ser Gly Pro Asn Leu Phe Ile Asn Asn Leu Asn
 290 295 300
 Lys Thr Asp Asn Gly Thr Tyr Arg Cys Glu Ala Ser Asn Ile Val Gly
 305 310 315 320
 Lys Ala His Ser Asp Tyr Met Leu Tyr Val Tyr Asp Ser Arg Ala Gly
 325 330 335
 Glu Glu Gly Ser Ile Arg Ala Val Asp His Ala Val Ile Gly Gly Val
 340 345 350
 Val Ala Val Val Val Phe Ala Met Leu Cys Leu Leu Ile Ile Leu Gly
 355 360 365
 Arg Tyr Phe Ala Arg His Lys Gly Thr Tyr Phe Thr His Glu Ala Lys
 370 375 380
 Gly Ala Asp Asp Ala Ala Asp Ala Asp Thr Ala Ile Ile Asn Ala Glu
 385 390 395 400
 Gly Gly Gln Asn Asn Ser Glu Glu Lys Lys Glu Tyr Phe Ile
 405 410

<210> 63
 <211> 1571
 <212> DNA
 <213> Homo sapiens

<400> 63
 ggccgcggag actgcgaccc tcttctctca gtctgcctta ctaccatgcc gctctacgag 60
 ggcctgggga gcggcgggga gaagacggcg gtcgtgatcg acctgggaga ggcctttacc 120
 aagtgtggat ttgctggaga aactgggtcca agatgtataa ttcctagtgt gataaaaaga 180
 gctgggatgc ctaagcctgt cagagttggt cagtataata tcaatacaga agaattatat 240
 tcctacctaaggaattcat ccacatacta tatttcaggc atctatttgt gaatcccaga 300
 gaccgccgag ttgtgattat cgaatcggtt ttatgtcctt ctacttcag agagacactc 360
 actcgtgttc ttttcaaata ttttgagggt ccatctgtct tgcttgctcc aagtcatcta 420
 atggctcttc tgacgcttgg aattaattct gccatggtcc tagattgtgg atatagggaa 480
 agcctgggtgt tacccatata tgaaggaaatc ccagttctaa attgttgggg agcactaccc 540
 ctaggaggaa aagctcttca caaagagttg gaaactcaac tattggaaca atgtactgtt 600
 gacacaagtg ttgctaaaga acagagcctt ccctcagtga tgggttcagt tccggaaggt 660
 gtcttagagg acattaaagc gcgtacttgc tttgtaagtg atctgaagcg aggactaaaa 720
 atccaagcag caaaatttaa tattgatggg aataatgagc gtccctcccc acccccaaat 780
 gttgactatc cattagatgg agagaagatt ttacatatcc ttggatcaat cagagattca 840
 gttgtggaaa ttctttttga acaagataat gaagagcaat cagttgccac tttaatattg 900
 gattccctta tacagtgtcc gatagacacc aggaagcaac tagcagagaa tttggtagtc 960
 ataggtggca cttctatgtt gccaggattt ctccacagat tgcttgaga aataaggat 1020
 ttggtagaaa aaccaaata taaaaaagca cttggcacta agacatttcg aattcact 1080
 ccacctgcaa aagctaattg tgtggcctgg ttgggagggg ctatttttgg agcattacaa 1140
 gatatacttg ggagccgttc tgtttcaaag gaattattata atcagacggg ccgtatacct 1200
 gattggtgtt ctctcaataa cccacctttg gaaatgatgt ttgatgtcgg gaaaactcaa 1260
 ccacctctga tgaagagagc attttccact gagaaataga agtttgatta aaaatcaacc 1320
 ttgcttcata tcaaataatt aaccaattat aagcaaattg tacaagatat gtaggatgtt 1380
 ttgttataga ggactatagt ggaagtgaag gcattctgtg tttactcttt gcattaatat 1440
 ataattcttt tgactttgtt tctcttgtgt agtggtaaaa tggtagctgg tgcttattga 1500
 gatttgctgt atttataatc ataaagtata gtaaagcaaa aaaaaaaaaa aaaaaaaaaa 1560
 aaaaaaaaaa a 1571

<210> 64
 <211> 417
 <212> PRT
 <213> Homo sapiens

<400> 64
 Met Pro Leu Tyr Glu Gly Leu Gly Ser Gly Gly Glu Lys Thr Ala Val
 1 5 10 15
 Val Ile Asp Leu Gly Glu Ala Phe Thr Lys Cys Gly Phe Ala Gly Glu
 20 25 30
 Thr Gly Pro Arg Cys Ile Ile Pro Ser Val Ile Lys Arg Ala Gly Met
 35 40 45
 Pro Lys Pro Val Arg Val Val Gln Tyr Asn Ile Asn Thr Glu Glu Leu
 50 55 60
 Tyr Ser Tyr Leu Lys Glu Phe Ile His Ile Leu Tyr Phe Arg His Leu
 65 70 75 80
 Leu Val Asn Pro Arg Asp Arg Arg Val Val Ile Ile Glu Ser Val Leu
 85 90 95
 Cys Pro Ser His Phe Arg Glu Thr Leu Thr Arg Val Leu Phe Lys Tyr
 100 105 110

6069-74A.SEQ.txt

Phe Glu Val Pro Ser Val Leu Leu Ala Pro Ser His Leu Met Ala Leu
 115 120 125
 Leu Thr Leu Gly Ile Asn Ser Ala Met Val Leu Asp Cys Gly Tyr Arg
 130 135 140
 Glu Ser Leu Val Leu Pro Ile Tyr Glu Gly Ile Pro Val Leu Asn Cys
 145 150 155 160
 Trp Gly Ala Leu Pro Leu Gly Gly Lys Ala Leu His Lys Glu Leu Glu
 165 170 175
 Thr Gln Leu Leu Glu Gln Cys Thr Val Asp Thr Ser Val Ala Lys Glu
 180 185 190
 Gln Ser Leu Pro Ser Val Met Gly Ser Val Pro Glu Gly Val Leu Glu
 195 200 205
 Asp Ile Lys Ala Arg Thr Cys Phe Val Ser Asp Leu Lys Arg Gly Leu
 210 215 220
 Lys Ile Gln Ala Ala Lys Phe Asn Ile Asp Gly Asn Asn Glu Arg Pro
 225 230 235 240
 Ser Pro Pro Pro Asn Val Asp Tyr Pro Leu Asp Gly Glu Lys Ile Leu
 245 250 255
 His Ile Leu Gly Ser Ile Arg Asp Ser Val Val Glu Ile Leu Phe Glu
 260 265 270
 Gln Asp Asn Glu Glu Gln Ser Val Ala Thr Leu Ile Leu Asp Ser Leu
 275 280 285
 Ile Gln Cys Pro Ile Asp Thr Arg Lys Gln Leu Ala Glu Asn Leu Val
 290 295 300
 Val Ile Gly Gly Thr Ser Met Leu Pro Gly Phe Leu His Arg Leu Leu
 305 310 315 320
 Ala Glu Ile Arg Tyr Leu Val Glu Lys Pro Lys Tyr Lys Lys Ala Leu
 325 330 335
 Gly Thr Lys Thr Phe Arg Ile His Thr Pro Pro Ala Lys Ala Asn Cys
 340 345 350
 Val Ala Trp Leu Gly Gly Ala Ile Phe Gly Ala Leu Gln Asp Ile Leu
 355 360 365
 Gly Ser Arg Ser Val Ser Lys Glu Tyr Tyr Asn Gln Thr Gly Arg Ile
 370 375 380
 Pro Asp Trp Cys Ser Leu Asn Asn Pro Pro Leu Glu Met Met Phe Asp
 385 390 395 400
 Val Gly Lys Thr Gln Pro Pro Leu Met Lys Arg Ala Phe Ser Thr Glu
 405 410 415
 Lys

<210> 65

<211> 1752

6069-74A.SEQ.txt

<212> DNA
 <213> Homo sapiens

<400> 65
 ggccaatcag agggacggcc ccagaatggc atggtagatg gaacgcagct gagaggtctg 60
 acaagatgta ccagggtccca ctaccactgg atcgggatgg gaccctggta cggctccgct 120
 tcaccatggg ggccctgggtc acgggtctgct gtccacttgt cgccttcctc ttctgcatcc 180
 tctgggtccct gctcttccac ttcaaggaga caacggccac acactgtggg gtgcccattt 240
 acctgccctc ggtgagctca gccatcggcg gggagggtgcc ccagcgctac gtgtggcggt 300
 tctgcatcgg cctgcactcg gcgcctcgct tcttgggtggc cttcgcttac tggaaacct 360
 acctcagctg cacctccccg tgttcttgct atcggcccgt ctgccgcctc aacttcggcc 420
 tcaatgtcgt ggagaacctc gcgttgctag tgctcactta tgtctcctcc tccgaggact 480
 tcaccatcca cgaaaatgct ttcatgtgtg tcattgcctc atccctcggg cacatgctcc 540
 tcacctgcat tctctggcgg ttgaccaaga agcacacagt aagtcaggag gatcgcaagt 600
 cctacagctg gaaacagcgg ctcttcatca tcaacttcat ctcttcttc tcggcgctgg 660
 ctgtctactt tcggcacaac atgtattgtg aggctggagt gtacaccatc ttgccatcc 720
 tggagtacac tgttgtctta accaacaatg cgttccacat gacggcctgg tgggacttcg 780
 ggaacaagga gctgctcata acctctcagc ctgaggaaaa gcgattctga acccttcagt 840
 cctgcttggg aggacgcagc ccactgcccga gaaacaagaa acacgatacc attctggcct 900
 tccccacccc acatcctctc ttggccttac tgaagatggg ggaagggtaa gaaggaaagg 960
 tgtaggccaa ggctcacccc agtgctgctg gcttctctc tccacccctc atatgggcgt 1020
 ggggtcctca aacatcacct ttacctgaga ggccccaga agctgagctg gcagagagct 1080
 ccaccatttg gtgctaaaaa aaaaaacgtc ctgagggttca tgaccaccat ccagtttctg 1140
 gcctttacac agtcaccttt cactgagggtc aggagcccct gagcagtggtc tgctccctga 1200
 caaccacagc catttctctg cacgggggtc attcatagga ctaatgtatt tcatgatcta 1260
 ctgtgcacat ccaggcctgt ggccacagtc ccctgctaaa gttgctcagg tgttctagtc 1320
 ctgacttcac ctttttgatt tgggtgtgtg cctagggtat gtacccttcc ccatctgagc 1380
 ctcggtgtgt ccatgtgtct ggcgggggat ggggtggactg tatgatttcc aaggactcta 1440
 ccagtcagtg gttctgatgt catcgggtgg aggtgggtgt ctatacctaa aggatgacct 1500
 gctccagaaa cagcaccagc acagcatgta ttttcttctc ttctgaaagt tctggcttgt 1560
 agacccctcc cctcctttgc aaaggtatgg gatagagggg tcagatgcag atcttactg 1620
 taaaatgggc tccctggtat ctctgtctt ccctactgct ccaaacccta aattttggtt 1680
 gtacatttta ttgaaagga aaataaattt ttttttggg ccaaaaaaaaa aaaaaaaaaa 1740
 aaaaaaaaaa aa 1752

<210> 66
 <211> 254
 <212> PRT
 <213> Homo sapiens

<400> 66
 Met Tyr Gln Val Pro Leu Pro Leu Asp Arg Asp Gly Thr Leu Val Arg
 1 5 10 15
 Leu Arg Phe Thr Met Val Ala Leu Val Thr Val Cys Cys Pro Leu Val
 20 25 30
 Ala Phe Leu Phe Cys Ile Leu Trp Ser Leu Leu Phe His Phe Lys Glu
 35 40 45
 Thr Thr Ala Thr His Cys Gly Val Pro Asn Tyr Leu Pro Ser Val Ser
 50 55 60
 Ser Ala Ile Gly Gly Glu Val Pro Gln Arg Tyr Val Trp Arg Phe Cys
 65 70 75 80
 Ile Gly Leu His Ser Ala Pro Arg Phe Leu Val Ala Phe Ala Tyr Trp
 85 90 95
 Asn His Tyr Leu Ser Cys Thr Ser Pro Cys Ser Cys Tyr Arg Pro Leu
 100 105 110
 Cys Arg Leu Asn Phe Gly Leu Asn Val Val Glu Asn Leu Ala Leu Leu
 Page 58

6069-74A.SEQ.txt
125

115

120

Val Leu Thr Tyr Val Ser Ser Ser Glu Asp Phe Thr Ile His Glu Asn
130 135 140
Ala Phe Ile Val Phe Ile Ala Ser Ser Leu Gly His Met Leu Leu Thr
145 150 155 160
Cys Ile Leu Trp Arg Leu Thr Lys Lys His Thr Val Ser Gln Glu Asp
165 170 175
Arg Lys Ser Tyr Ser Trp Lys Gln Arg Leu Phe Ile Ile Asn Phe Ile
180 185 190
Ser Phe Phe Ser Ala Leu Ala Val Tyr Phe Arg His Asn Met Tyr Cys
195 200 205
Glu Ala Gly Val Tyr Thr Ile Phe Ala Ile Leu Glu Tyr Thr Val Val
210 215 220
Leu Thr Asn Met Ala Phe His Met Thr Ala Trp Trp Asp Phe Gly Asn
225 230 235 240
Lys Glu Leu Leu Ile Thr Ser Gln Pro Glu Glu Lys Arg Phe
245 250

<210> 67
<211> 781
<212> DNA
<213> Homo sapiens

<400> 67
cactcctgca gacaaggcac tgattgcccc agaccatgta gttccagctc cagaagagtg 60
ctatgtgtat agtccatttg gctctgctta taaacttcaa agttacactg aaggatacgg 120
taaaaacacc agtttagtaa ccatttttat gatttggaaat accatgatgg gaacatctat 180
actaagcatt ccttggggca taaaacaggc tggatttact actggaatgt gtgtcatcat 240
actgatgggc cttttaacac ttatttgctg ctacagagta gtgaaatcac ggactatgat 300
gttttcattg gataaccacta cctgggaata tccagatgtc tgcagacatt atttcggctc 360
ctttgggcag tggtcgagtc tcctcttctc cttgggtgct ctcattggag caatgatagt 420
ttattgggtg cttatgtcaa attttctttt taatactgga aagtttattt ttagtaagta 480
tctatatcat atgcttttaa cacagtactt tcaaatacta ttaccactgt aatgttagtt 540
ctagccttaa attctaggac ttgggataaa taaaataaga agtaacatat ataattttgg 600
aaaatatatt ttattcagtt ggctttctgt ggttgtgctc tcaaatatag tgtatgctta 660
tttccaaaca ttaatctttg aagggaataat attcctccaa aatctttagt taaaataaaa 720
tatgtctata atccaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa 780
a 781

<210> 68
<211> 127
<212> PRT
<213> Homo sapiens

<400> 68
Met Ile Trp Asn Thr Met Met Gly Thr Ser Ile Leu Ser Ile Pro Trp
1 5 10 15
Gly Ile Lys Gln Ala Gly Phe Thr Thr Gly Met Cys Val Ile Ile Leu
20 25 30
Met Gly Leu Leu Thr Leu Tyr Cys Cys Tyr Arg Val Val Lys Ser Arg
35 40 45

6069-74A.SEQ.txt

Thr Met Met Phe Ser Leu Asp Thr Thr Thr Trp Glu Tyr Pro Asp Val
 50 55 60

Cys Arg His Tyr Phe Gly Ser Phe Gly Gln Trp Ser Ser Leu Leu Phe
 65 70 75 80

Ser Leu Val Ser Leu Ile Gly Ala Met Ile Val Tyr Trp Val Leu Met
 85 90 95

Ser Asn Phe Leu Phe Asn Thr Gly Lys Phe Ile Phe Ser Lys Tyr Leu
 100 105 110

Tyr His Met Leu Leu Thr Gln Tyr Phe Gln Ile Leu Leu Pro Leu
 115 120 125

<210> 69

<211> 649

<212> DNA

<213> Homo sapiens

<400> 69

gagcaactcc	cttccccatc	tctgctcacc	atgtggacgc	tgaaatcgtc	cctggtcctg	60
cttctgtgcc	tcacctgcag	ctatgccttt	atgttctctt	ctctgagaca	gaaaactagc	120
gaaccccagg	ggaagggtgca	atacggagag	cactttcgga	ttcggcagaa	tctaccagag	180
cacacccaag	gctggcttgg	gagcaaatgg	ctctggcttc	ttttgttgt	tgtgccgttt	240
gtgatactgc	agtgtcaaag	agacagtgag	aagaataagg	agcagagtcc	tcctggcctt	300
cgaggcggcc	aacttcactc	tccattaaag	aaaaaaagaa	atgcttcccc	caacaaagac	360
tgtgcattca	ataccttaat	ggaactcgag	gtggagctta	tgaaatttgt	gtccaaagtg	420
cggaatctta	aacgtgccat	ggcaacaggt	agtggcagta	acctcaggct	tcgaaagtca	480
gagatgcctg	cagatccata	ccatgtcacg	atctgtgaaa	tatggggaga	agaaagctct	540
agctgaatgg	atttgtgtgt	caggagagaa	aaaagttag	tgttgacaaa	ctgtatgcaa	600
actaataaaa	ctattctgaa	gaaaagaaaa	aaaaaaaaaa	aaaaaaaaaa		649

<210> 70

<211> 171

<212> PRT

<213> Homo sapiens

<400> 70

Met Trp Thr Leu Lys Ser Ser Leu Val Leu Leu Leu Cys Leu Thr Cys
 1 5 10 15

Ser Tyr Ala Phe Met Phe Ser Ser Leu Arg Gln Lys Thr Ser Glu Pro
 20 25 30

Gln Gly Lys Val Gln Tyr Gly Glu His Phe Arg Ile Arg Gln Asn Leu
 35 40 45

Pro Glu His Thr Gln Gly Trp Leu Gly Ser Lys Trp Leu Trp Leu Leu
 50 55 60

Phe Val Val Val Pro Phe Val Ile Leu Gln Cys Gln Arg Asp Ser Glu
 65 70 75 80

Lys Asn Lys Glu Gln Ser Pro Pro Gly Leu Arg Gly Gly Gln Leu His
 85 90 95

Ser Pro Leu Lys Lys Lys Arg Asn Ala Ser Pro Asn Lys Asp Cys Ala
 100 105 110

Phe Asn Thr Leu Met Glu Leu Glu Val Glu Leu Met Lys Phe Val Ser
 115 120 125

6069-74A.SEQ.txt

Lys Val Arg Asn Leu Lys Arg Ala Met Ala Thr Gly Ser Gly Ser Asn
 130 135 140

Leu Arg Leu Arg Lys Ser Glu Met Pro Ala Asp Pro Tyr His Val Thr
 145 150 155 160

Ile Cys Glu Ile Trp Gly Glu Glu Ser Ser Ser
 165 170

<210> 71
 <211> 1456
 <212> DNA
 <213> Homo sapiens

<400> 71
 cacggctgtc ttatctgcaa gtgcagagag gcctctgctt cagctgggccc acccatcctg 60
 tcgggcactt gtctcaccgt ggatgggtcat catcataaaa atgaggagag ctggcacgat 120
 ggggtgccggg aatgctactg tctcaatgga cgggaaatgt gtgccctgat cacctgcccg 180
 gtgcctgcct gtggcaaccc caccattcac cctggacagt gctgcccac atgtgcagat 240
 gactttgtgg tgcagaagcc agagctcagt actccctcca ttgcccacgc ccctggagga 300
 gaatactttg tgggaaggaga aacgtggaac attgactcct gtactcagtg cacctgccac 360
 agcggacggg tgctgtgtga gacagagggtg tgcccaccgc tgctctgcca gaaccctca 420
 cgcacccagg attcctgctg cccacagtggt acagatcaac cttttcggcc ttccttgtcc 480
 cgcaataaca gcgtaccta ttattgcaaa aatgatgaag gggatatatt cctggcagct 540
 gagtcctgga agcctgacgt ttgtaccagc tgcattctgca ttgatagcgt aattagctgt 600
 ttctctgagt cctgcccttc tgtatcctgt gaaagacctg tcttgagaaa aggccagtgt 660
 tgtccctact gcatagaaga cacaattcca aagaagggtg tggtgccactt cagtgggaag 720
 gcctatgccg acgaggagcg gtgggacctt gacagctgca cccactgcta ctgcctgcag 780
 ggccagaccc tctgctcgac cgtcagctgc cccctctgc cctgtgttg gcccatacaac 840
 gtggaaggaa gttgctgccc aatgtgtcca gaaatgtatg tcccagaacc aaccaatata 900
 cccattgaga agacaaacca tcgaggagag gttgacctgg aggttcccct gtggcccacg 960
 cctagtgaat atgatatcgt ccatctccct agagatatgg gtcacctcca ggtagattac 1020
 agagataaca ggctgcaccc aagtgaagat tcttactagg actccattgc ctcagttgtg 1080
 gttcccataa ttatatgcct ctctattata atagcattcc tattcatcaa tcagaagaaa 1140
 cagtggatac cactgctttg ctggtatcga acaccaacta agccttcttc cttaaataat 1200
 cagctagtat ctgtggactg caagaaaagga accagagtcc aggtggacag ttcccagaga 1260
 atgctaagaa ttgcagaacc agatgcaaga ttcagtggct tctacagcat gcaaaaacag 1320
 aaccatctac aggcagacaa tttctaccaa acagtgtgaa gaaaggcaac taggatgagg 1380
 tttcaaaaga cggaagacga ctaaatctgc tctaaaaagt aaactagaat ttgtgcactt 1440
 aaaaaaaaaa aaaaaa 1456

<210> 72
 <211> 400
 <212> PRT
 <213> Homo sapiens

<400> 72
 Met Cys Ala Leu Ile Thr Cys Pro Val Pro Ala Cys Gly Asn Pro Thr
 1 5 10 15
 Ile His Pro Gly Gln Cys Cys Pro Ser Cys Ala Asp Asp Phe Val Val
 20 25 30
 Gln Lys Pro Glu Leu Ser Thr Pro Ser Ile Cys His Ala Pro Gly Gly
 35 40 45
 Glu Tyr Phe Val Glu Gly Glu Thr Trp Asn Ile Asp Ser Cys Thr Gln
 50 55 60
 Cys Thr Cys His Ser Gly Arg Val Leu Cys Glu Thr Glu Val Cys Pro
 65 70 75 80

6069-74A.SEQ.txt

Pro Leu Leu Cys Gln Asn Pro Ser Arg Thr Gln Asp Ser Cys Cys Pro
 85 90 95
 Gln Cys Thr Asp Gln Pro Phe Arg Pro Ser Leu Ser Arg Asn Asn Ser
 100 105 110
 Val Pro Asn Tyr Cys Lys Asn Asp Glu Gly Asp Ile Phe Leu Ala Ala
 115 120 125
 Glu Ser Trp Lys Pro Asp Val Cys Thr Ser Cys Ile Cys Ile Asp Ser
 130 135 140
 Val Ile Ser Cys Phe Ser Glu Ser Cys Pro Ser Val Ser Cys Glu Arg
 145 150 155 160
 Pro Val Leu Arg Lys Gly Gln Cys Cys Pro Tyr Cys Ile Glu Asp Thr
 165 170 175
 Ile Pro Lys Lys Val Val Cys His Phe Ser Gly Lys Ala Tyr Ala Asp
 180 185 190
 Glu Glu Arg Trp Asp Leu Asp Ser Cys Thr His Cys Tyr Cys Leu Gln
 195 200 205
 Gly Gln Thr Leu Cys Ser Thr Val Ser Cys Pro Pro Leu Pro Cys Val
 210 215 220
 Glu Pro Ile Asn Val Glu Gly Ser Cys Cys Pro Met Cys Pro Glu Met
 225 230 235 240
 Tyr Val Pro Glu Pro Thr Asn Ile Pro Ile Glu Lys Thr Asn His Arg
 245 250 255
 Gly Glu Val Asp Leu Glu Val Pro Leu Trp Pro Thr Pro Ser Glu Asn
 260 265 270
 Asp Ile Val His Leu Pro Arg Asp Met Gly His Leu Gln Val Asp Tyr
 275 280 285
 Arg Asp Asn Arg Leu His Pro Ser Glu Asp Ser Ser Leu Asp Ser Ile
 290 295 300
 Ala Ser Val Val Val Pro Ile Ile Ile Cys Leu Ser Ile Ile Ile Ala
 305 310 315 320
 Phe Leu Phe Ile Asn Gln Lys Lys Gln Trp Ile Pro Leu Leu Cys Trp
 325 330 335
 Tyr Arg Thr Pro Thr Lys Pro Ser Ser Leu Asn Asn Gln Leu Val Ser
 340 345 350
 Val Asp Cys Lys Lys Gly Thr Arg Val Gln Val Asp Ser Ser Gln Arg
 355 360 365
 Met Leu Arg Ile Ala Glu Pro Asp Ala Arg Phe Ser Gly Phe Tyr Ser
 370 375 380
 Met Gln Lys Gln Asn His Leu Gln Ala Asp Asn Phe Tyr Gln Thr Val
 385 390 395 400

6069-74A.SEQ.txt

<211> 4723
 <212> DNA
 <213> Homo sapiens

<400> 73

```

ggccttcatg gcctatTTTT tttttttttt aaatgataca acttaatttt attaggacaa 60
ggctgggtggg cactggagtg gcaccttcag ggccaggaga ggcactgggg aggggtcaca 120
ggatgctact cgggcaccta gaagccacag ctgccctcca cagagcggca ctgcaccatg 180
cgaggaatg tctcgacctt gtccatgtcc ttctgaagc agtagagcag cccgtagtcc 240
ttgagcagtg cgtcatgggt gtgagagttt gtgtcaaact tgctgtaggt ctgcttgagg 300
atctgcccag tccggcggct gccgtcttcc agcctcccca tcagcgtttg gatgccttcc 360
tctaggtcct ttaggaggtg atagtcacg ttgtccgagg tgtcatacac caggttggtg 420
gcgaacatac tcctgaggaa ccgcacgggc tccagccacg actcgatgag cagcaggagg 480
atgaggagca gctctagatt ggatttctgt tgcgtttcct ccatgttgga ggggtgtcga 540
atagagtctg agaagcagaa ggaggtcttg gagtcatgca ggaatgaata cttctggtcc 600
tttgggatat aggtttcttc aaactcctgg taggtgtcaa tggccagctg gtgcgcgcga 660
tgggcttgga gcatagcgtg gtcaaaaagc ctggataacg gaacggtttg gacggcacca 720
gcctcttgaa gccagggcag gcagagcagg gcaaaagcca ggagcaggga cgtccgggag 780
cctggagcca ttgccactag gtgagctgtc cacaggaccc tgagtggttc ggggagttcg 840
gccttcatcg cctaggagcg gcgcaggagc ggcgcgagcg gggcgcgcgg agcggacgac 900
gcggatcttg tgctgcgcca ccgcgcccac tcggcagctc gggaggcggg gaccggcccc 960
gaggctgcgc cgtgcggggg ccggccgact cggaggagga gaggaggagg gcgccgccgg 1020
cccgggctgg agccgagcgc agcagccacc gccgcgcccg cgccagaagt ttgggttgaa 1080
ccggagctgc cgggaggaaa cttttttctt ttttccccct ccctcccggg aggaggagga 1140
ggaggaggag gggaagctgc cgccggcgcc aaggctcgtg ggctcggggg cggcgcgggc 1200
cgcagaaggg gcgggggcct cgccccgcga gggagggcgc gggcgcgcgg ccccagagag 1260
ggcgggtgagg accgcgggct gctgggtcgg cggcgcgcgg ggcgcggtg ccccgcgag 1320
gggaggggcg ccgccccgct cccggccccg ctgcgaggag gaggcgcgcg cgcgcgagga 1380
ggatgtactt ggtggcgggg gacagggggg tggccggctg cgggcacctc ctgggtctcg 1440
tgctggggct gctgctgctg ctggcgcgct ccggcacccg ggcgctggtc tgcctgccct 1500
gtgacgagtc caagtgcgag gagcccagga actgcccggg gagcatcgtg cagggcgtct 1560
gcggctgctg ctacacgtgc gccagccaga ggaacgagag ctgcggcggg accttcggga 1620
tttacggtaac ctgcgaccgg gggtgctggt gtgtcatccg cccccgctc aatggcgact 1680
ccctcaccga gtacgaagcg ggcgtttgct aagatgagaa ctggactgat gaccaactgc 1740
ttggttttaa accatgcaat gaaaacctta ttgctggctg caatataatc aatgggaaat 1800
gtgaatgtaa caccattcga acctgcagca atccctttga gtttccaagt caggatatgt 1860
gcctttcagc tttaaagaga attgaagaag agaagccaga ttgctccaag gcccgtggtg 1920
aagtcagatt ctctccacgt tgcctgaag attctgttct gatcgagggt tatgtctctc 1980
ctggggagtg ctgtccctta cccagccgct gcgtgtgcaa ccccgaggc tgtctgcgca 2040
aagtctgcca gccgggaaac ctgaacatac tagtgtcaaa agcctcaggg aagccgggag 2100
agtgtgtga cctctatgag tgcaaacagc ttttcggcgt ggactgcagg actgtggaat 2160
gccctcctgt tcagcagacc gcgtgtcccc cggacagcta tgaaactcaa gtcagactaa 2220
ctgcagatgg ttgctgtact ttgccaacaa gatgcgagtg tctctctggc ttatgtggtt 2280
tcccgtgtg tgaggtggga tccactcccc tcgtggcgat gggacacctg 2340
gaaagtctg tgatgtcttt gaatgtgtta atgatacaaa gccagcctgc gtatttaaca 2400
atgtggaata ttatgatgga gacatgtttc gaatggacaa ctgtcggttc tgtcgatgcc 2460
aagggggcgt tgccatctgc ttcaactgcc agtgtggtga gataaactgc gagaggtaact 2520
acgtgcccga aggagagtg cgtgccaat ggctgatcc ttgcccacgg agaccggtgg cgggaagacg 2640
actgcacatt ctgccagtg gtcaacgggt aacgccactg cgttgcgacc gtctgcggac 2700
agacctgcac aaacctgtg aaagtgcctg gggagtgttg ccctgtgtgc gaagaaccaa 2760
ccatcatcac agttgatcca cctgcatgtg gggagtattc aaactgcact ctgacaggga 2820
aggactgcat taatggtttc aaacgcgatc acaatggttg tcggacctgt cagtgcataa 2880
acaccgagga actatgttca gaacgtaaac aaggctgcac cttgaactgt cccttcggtt 2940
tccttactga tgcccaaaa tgtagatct gtgagtgccg cccaaggccc aagaagtgca 3000
gacccataat ctgtgacaag tattgtccac ttggattgct gaagaataag cacggctgtg 3060
acatctgtcg ctgtaagaaa tgtccagagc tctcatgcag taagatctgc cccttgggtt 3120
tccagcagga cagtcacggc tgtcttatct gcaagtgcag agaggcctct gcttcagctg 3180
ggccacccat cctgtcgggc acttgcttca ccgtggatgg tcatcatcat aaaaatgagg 3240
agagctggca cgtgggtgc cgggaatgct actgtctcaa tggacgggaa atgtgtgccc 3300
tgatcacctg cccggtgcct gcctgtggca accccaccat tcaccctgga cagtgtgccc 3360
catcatgtgc agatgacctt ttggtgcaga agccagagct cagtactccc tccatttgcc 3420
acgcccctgg aggagaatac tttgtggaag gagaaacgtg gaacattgac tcctgtactc 3480

```

6069-74A.SEQ.txt

```

agtgacacgtg ccacagcgga cgggtgctgt gtgagacaga ggtgtgcccc cgcgtgctct 3540
gccagaaccc ctcacgcacc caggattcct gctgcccaca gtgtacagat caaccttttc 3600
ggccttcctt gtcccgaat aacagcgtag ctaattactg caaaaatgat gaaggggata 3660
tattcctggc agctgagtc tggaagcctg acgtttgtac cagctgcata tgcattgata 3720
gcgtaattag ctgtttctct gagtcctgcc ctctgtatc ctgtgaaaga cctgtcttga 3780
gaaaaggcca gtgttgctcc tactgcatag aagacacaat tccaaagaag gtggtgtgcc 3840
acttcagtgg gaaggcctat gccgacgagg agcggtgagg ccttgacagc tgcacccact 3900
gctactgcct gcagggccag accctctgct cgaccgtcag ctgccccct ctgccctgtg 3960
ttgagcccat caacgtggaa ggaagtgtgt gcccaatgtg tccagaaatg tatgtcccag 4020
aaccaaccaa tataccattt gagaagacaa accatcgagg agaggttgac ctggagggtt 4080
ccctgtggcc cagcctagt gaaaatgata tcgtccatct ccctagagat atgggtcacc 4140
tccaggtaga ttacagagat aacaggctgc acccaagtga agattcttca ctggactcca 4200
ttgcctcagt tgtggttccc ataattatat gcctctctat tataatagca ttcctattca 4260
tcaatcagaa gaaacagtgg ataccactgc ttgtctggta tcgaacacca actaagcctt 4320
cttccttaaa taatcagtta gtatctgtgg actgcaagaa aggaaccaga gtccagggtg 4380
acagttccca gagaatgcta agaattgcag aaccagatgc aagattcagt ggcttctaca 4440
gcatgcaaaa acagaaccat ctacaggcag acaatttcta ccaaacagtg tgaagaaagg 4500
caactaggat gaggtttcaa aagacggaag acgactaaat ctgctctaaa aagtaaacta 4560
gaatttgtgc acttgcttag tggattgtat tggattgtga ctgatgtac agcgctaaga 4620
ccttactggg atgggctctg tctacagcaa tgtgcagaac aagcattccc cctcaaacct 4680
aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaa 4723

```

<210> 74

<211> 1036

<212> PRT

<213> Homo sapiens

<400> 74

```

Met Tyr Leu Val Ala Gly Asp Arg Gly Leu Ala Gly Cys Gly His Leu
 1          5          10          15
Leu Val Ser Leu Leu Gly Leu Leu Leu Leu Ala Arg Ser Gly Thr
          20          25          30
Arg Ala Leu Val Cys Leu Pro Cys Asp Glu Ser Lys Cys Glu Glu Pro
          35          40          45
Arg Asn Cys Pro Gly Ser Ile Val Gln Gly Val Cys Gly Cys Cys Tyr
          50          55          60
Thr Cys Ala Ser Gln Arg Asn Glu Ser Cys Gly Gly Thr Phe Gly Ile
          65          70          75          80
Tyr Gly Thr Cys Asp Arg Gly Leu Arg Cys Val Ile Arg Pro Pro Leu
          85          90          95
Asn Gly Asp Ser Leu Thr Glu Tyr Glu Ala Gly Val Cys Glu Asp Glu
          100          105          110
Asn Trp Thr Asp Asp Gln Leu Leu Gly Phe Lys Pro Cys Asn Glu Asn
          115          120          125
Leu Ile Ala Gly Cys Asn Ile Ile Asn Gly Lys Cys Glu Cys Asn Thr
          130          135          140
Ile Arg Thr Cys Ser Asn Pro Phe Glu Phe Pro Ser Gln Asp Met Cys
          145          150          155          160
Leu Ser Ala Leu Lys Arg Ile Glu Glu Glu Lys Pro Asp Cys Ser Lys
          165          170          175
Ala Arg Cys Glu Val Gln Phe Ser Pro Arg Cys Pro Glu Asp Ser Val
          180          185          190

```


6069-74A.SEQ.txt

Leu Ile Glu Gly Tyr Ala Pro Pro Gly Glu Cys Cys Pro Leu Pro Ser
 195 200 205
 Arg Cys Val Cys Asn Pro Ala Gly Cys Leu Arg Lys Val Cys Gln Pro
 210 215 220
 Gly Asn Leu Asn Ile Leu Val Ser Lys Ala Ser Gly Lys Pro Gly Glu
 225 230 235 240
 Cys Cys Asp Leu Tyr Glu Cys Lys Pro Val Phe Gly Val Asp Cys Arg
 245 250 255
 Thr Val Glu Cys Pro Pro Val Gln Gln Thr Ala Cys Pro Pro Asp Ser
 260 265 270
 Tyr Glu Thr Gln Val Arg Leu Thr Ala Asp Gly Cys Cys Thr Leu Pro
 275 280 285
 Thr Arg Cys Glu Cys Leu Ser Gly Leu Cys Gly Phe Pro Val Cys Glu
 290 295 300
 Val Gly Ser Thr Pro Arg Ile Val Ser Arg Gly Asp Gly Thr Pro Gly
 305 310 315 320
 Lys Cys Cys Asp Val Phe Glu Cys Val Asn Asp Thr Lys Pro Ala Cys
 325 330 335
 Val Phe Asn Asn Val Glu Tyr Tyr Asp Gly Asp Met Phe Arg Met Asp
 340 345 350
 Asn Cys Arg Phe Cys Arg Cys Gln Gly Gly Val Ala Ile Cys Phe Thr
 355 360 365
 Ala Gln Cys Gly Glu Ile Asn Cys Glu Arg Tyr Tyr Val Pro Glu Gly
 370 375 380
 Glu Cys Cys Pro Val Cys Glu Asp Pro Val Tyr Pro Phe Asn Asn Pro
 385 390 395 400
 Ala Gly Cys Tyr Ala Asn Gly Leu Ile Leu Ala His Gly Asp Arg Trp
 405 410 415
 Arg Glu Asp Asp Cys Thr Phe Cys Gln Cys Val Asn Gly Glu Arg His
 420 425 430
 Cys Val Ala Thr Val Cys Gly Gln Thr Cys Thr Asn Pro Val Lys Val
 435 440 445
 Pro Gly Glu Cys Cys Pro Val Cys Glu Glu Pro Thr Ile Ile Thr Val
 450 455 460
 Asp Pro Pro Ala Cys Gly Glu Leu Ser Asn Cys Thr Leu Thr Gly Lys
 465 470 475 480
 Asp Cys Ile Asn Gly Phe Lys Arg Asp His Asn Gly Cys Arg Thr Cys
 485 490 495
 Gln Cys Ile Asn Thr Glu Glu Leu Cys Ser Glu Arg Lys Gln Gly Cys
 500 505 510
 Thr Leu Asn Cys Pro Phe Gly Phe Leu Thr Asp Ala Gln Asn Cys Glu
 515 520 525

6069-74A.SEQ.txt

Ile Cys Glu Cys Arg Pro Arg Pro Lys Lys Cys Arg Pro Ile Ile Cys
 530 535 540
 Asp Lys Tyr Cys Pro Leu Gly Leu Leu Lys Asn Lys His Gly Cys Asp
 545 550 555 560
 Ile Cys Arg Cys Lys Lys Cys Pro Glu Leu Ser Cys Ser Lys Ile Cys
 565 570 575
 Pro Leu Gly Phe Gln Gln Asp Ser His Gly Cys Leu Ile Cys Lys Cys
 580 585 590
 Arg Glu Ala Ser Ala Ser Ala Gly Pro Pro Ile Leu Ser Gly Thr Cys
 595 600 605
 Leu Thr Val Asp Gly His His His Lys Asn Glu Glu Ser Trp His Asp
 610 615 620
 Gly Cys Arg Glu Cys Tyr Cys Leu Asn Gly Arg Glu Met Cys Ala Leu
 625 630 635 640
 Ile Thr Cys Pro Val Pro Ala Cys Gly Asn Pro Thr Ile His Pro Gly
 645 650 655
 Gln Cys Cys Pro Ser Cys Ala Asp Asp Phe Val Val Gln Lys Pro Glu
 660 665 670
 Leu Ser Thr Pro Ser Ile Cys His Ala Pro Gly Gly Glu Tyr Phe Val
 675 680 685
 Glu Gly Glu Thr Trp Asn Ile Asp Ser Cys Thr Gln Cys Thr Cys His
 690 695 700
 Ser Gly Arg Val Leu Cys Glu Thr Glu Val Cys Pro Pro Leu Leu Cys
 705 710 715 720
 Gln Asn Pro Ser Arg Thr Gln Asp Ser Cys Cys Pro Gln Cys Thr Asp
 725 730 735
 Gln Pro Phe Arg Pro Ser Leu Ser Arg Asn Asn Ser Val Pro Asn Tyr
 740 745 750
 Cys Lys Asn Asp Glu Gly Asp Ile Phe Leu Ala Ala Glu Ser Trp Lys
 755 760 765
 Pro Asp Val Cys Thr Ser Cys Ile Cys Ile Asp Ser Val Ile Ser Cys
 770 775 780
 Phe Ser Glu Ser Cys Pro Ser Val Ser Cys Glu Arg Pro Val Leu Arg
 785 790 795 800
 Lys Gly Gln Cys Cys Pro Tyr Cys Ile Glu Asp Thr Ile Pro Lys Lys
 805 810 815
 Val Val Cys His Phe Ser Gly Lys Ala Tyr Ala Asp Glu Glu Arg Trp
 820 825 830
 Asp Leu Asp Ser Cys Thr His Cys Tyr Cys Leu Gln Gly Gln Thr Leu
 835 840 845
 Cys Ser Thr Val Ser Cys Pro Pro Leu Pro Cys Val Glu Pro Ile Asn
 850 855 860

6069-74A.SEQ.txt

Val Glu Gly Ser Cys Cys Pro Met Cys Pro Glu Met Tyr Val Pro Glu
 865 870 875 880
 Pro Thr Asn Ile Pro Ile Glu Lys Thr Asn His Arg Gly Glu Val Asp
 885 890 895
 Leu Glu Val Pro Leu Trp Pro Thr Pro Ser Glu Asn Asp Ile Val His
 900 905 910
 Leu Pro Arg Asp Met Gly His Leu Gln Val Asp Tyr Arg Asp Asn Arg
 915 920 925
 Leu His Pro Ser Glu Asp Ser Ser Leu Asp Ser Ile Ala Ser Val Val
 930 935 940
 Val Pro Ile Ile Ile Cys Leu Ser Ile Ile Ile Ala Phe Leu Phe Ile
 945 950 955 960
 Asn Gln Lys Lys Gln Trp Ile Pro Leu Leu Cys Trp Tyr Arg Thr Pro
 965 970 975
 Thr Lys Pro Ser Ser Leu Asn Asn Gln Leu Val Ser Val Asp Cys Lys
 980 985 990
 Lys Gly Thr Arg Val Gln Val Asp Ser Ser Gln Arg Met Leu Arg Ile
 995 1000 1005
 Ala Glu Pro Asp Ala Arg Phe Ser Gly Phe Tyr Ser Met Gln Lys Gln
 1010 1015 1020
 Asn His Leu Gln Ala Asp Asn Phe Tyr Gln Thr Val
 1025 1030 1035

<210> 75
 <211> 3861
 <212> DNA
 <213> Homo sapiens

<400> 75
 gtgcacgcgt ggcagacgga gaaggccagt gccagcttg aaggttctgt caccttttgc 60
 agtgggtccaa atgagaaaaa agtggaataat gggagggcatg aaatacatct ttctgttgtt 120
 gttcttttctt ttgctagaag gaggcaaaac agagcaagta aaacattcag agacatatgt 180
 catgtttcaa gacaagaagt acagagtggg tgagagatgg catccttacc tggaaacctta 240
 tgggttgggt tactgcgtga actgcatctg ctacagagaat gggaatgtgc ttgacagccg 300
 agtcagatgt ccaaattgttc attgcctttc tcctgtgcat attcctcatc tgtgctgccc 360
 tcgctgcccc gactccttac ccccagtgaa caataagggtg accagcaagt cttgcgagta 420
 caatgggaca acttaccacac atggagagct gttcgtagct gaagggctct ttcagaatcg 480
 gcaacccaat caatgcaccc agtgcagctg ttccggaggga aacgtgtatt gtgggtctcaa 540
 gacttgcccc aaattaacct gtgccttccc agtctctgtt ccagattcct gctgccgggt 600
 atgcagagga gatggagaac tgtcatggga acattctgat ggtgatatct tccggcaacc 660
 tgccaacaga gaagcaagac attcttacca ccgctctcac tatgatcctc caccaagccg 720
 acaggctgga ggtctgtccc gctttcctgg ggccagaagt caccggggag ctcttatgga 780
 ttcccagcaa gcatcaggaa ccattgtgca aattgtcatc aataacaaac acaagcatgg 840
 acaagtgtgt gtttccaatg gaaagacctt ttctcatggc gagtcctggc acccaaacct 900
 ccgggcattt ggcattgtgg agtgtgtgct atgtacttgt aatgtcacca agcaagagt 960
 taagaaaatc cactgcccc aatcgatacc ctgcaagtat cctcaaaaaa tagacggaaa 1020
 gtgctgcaag gtgtgtccag gtaaaaaagc aaaagaagaa cttccaggcc aaagctttga 1080
 caataaaggc tacttctgcg gggaagaaac gatgcctgtg tatgagtctg tattcatgga 1140
 ggtatggggg acaaccagaa aaatagcact ggagactgag agaccacctc aggtagaggt 1200
 ccacgttttg actattcgaa agggcattct ccagcacttc catattgaga agatctccaa 1260
 gaggatgttt gaggagcttc ctcaactcaa gctgggtgacc agaacaaccc tgagccagt 1320

6069-74A.SEQ.txt

```

gaagatcttc accgaaggag aagctcagat cagccagatg tgttcaagtc gtgtatgcag 1380
aacagagctt gaagatttag tcaaggtttt gtacctggag agatctgaaa agggccactg 1440
ttaggcaaga cagacagtat tggatagggt aaagcaagaa aactcaagct gcagctggac 1500
tgcaggctta ttttgcttaa gtcaacagtg ccctaaaact ccaaactcaa atgcagtcaa 1560
ttattcacgc catgcacagc ataatttgct cctttgtgtg gagtgggtgtg tcagcccttg 1620
aacatctcct ccaaagagac tagaagagtc ttaaattata tgtgggagga ggagggatag 1680
aacatcacaa cactgctcta gtttcttgga gaatcacatt tctttacagg ttaaagacaa 1740
acaagacccc aggggttttta tctagaaaag tattcaagtg aaagaaaagag aagggaattg 1800
cttagtagga gttctgcagt atagaacaat tacttgtatg aaattatacc tttgaatttt 1860
agaatgtcat gtgttctttt aaaaaaatta gctccccatc ctccctcttc actccctccc 1920
tccctccttc tctctctctc tctctctccc tctctcacag acacacacac acacacacac 1980
acacacacgc acgtccacac tcacattaaa ctaaagcttt atttgaagca aagctagcca 2040
aaattctacg ttacttttcc cttgactgga tcccaagtag cttggaagtt tttgtgcccc 2100
ggagagtaaa taactttagg caagaggctc tgcccttagg tctttgtggc tgtttaagtc 2160
accaacaata gagttagggg aaagaataaa aacactttca tagcctcatt cattcactta 2220
gaagtggtaa taatttttcc ctaatgatac cacttttctt ttccccctgt acctatggga 2280
cttcagaaaa gaagttaaatt tgagtaaaat catcagaaac tgaatccatg taagaaaaaa 2340
taattgttga agaaagaagt tgatagaatt caaaaaggcc atctttttgc tttcacatca 2400
ataaaattta ccaagtaata gatcagtact cactaatatt tttgagacca tagttgtctg 2460
gtcagaaaaa ttatattaaa ttagttaaatt ctagaagctc tttaaaaggg aagttttcct 2520
tcttctccaa ttataggagt tgattttttac tttgcaaagt ggctcgggtc tcatgagcat 2580
ctgcatgttg actcttcagt taagaaaatt gttgttcatt tagggaggtg gatattctga 2640
tgaagatctt tatcctaaac cttcctacta tccttgtctt attcatcaag cagatatttt 2700
agtcaagaat tccagagaag gctgctccta aaatgtctac ttgcagccca ataccagagc 2760
ataaaactatc cattctgggg tctggcttta gaaatcatct ttgtgggaag acctaatctt 2820
tcacagcaag gatctcaggc atgccttcta gatttgttcc ctctgagggg caggaatgaa 2880
ctgtagaaat gttttaagga cccagaaacc ccatatgtct cattccatga ctatagggtga 2940
gagaattctt tcctaagagg gtttgatacc aataggggaa aatgtaaaat gttcagtcct 3000
tatgacaacc tggcataaag gagtcaattc ttatgaaaga gacacaaggg ccttatggcc 3060
agggtttctt gggacaagac tctcaccagc acatcacaca cgttctcctt ggaagagaga 3120
agcagtacat cccggttgag aggtcacaaa gcattagtgt gtgtgtgtgt gtgtgtgtgt 3180
gtgtgtgtgt gtgtgtgtgt gtgtgtgtgt ggtaaaaggg ggaaggtgtt 3240
atgagggtgc tccctcgcgc ccagaggtgg cagtgtattc ataagtggga gactagtaac 3300
tagatcctaa ggcaaagagg tgtttctcct tttggatgat tcatcccaa gccttcccac 3360
ccaggtgttc tctgaaagct tagccttaag agaacacgca gagagtttcc ctagatatac 3420
tcctgcctcc aggtgctggg acacaccttt gcaaaatgct gtgggaagca ggagctgggg 3480
agctgtgtta agtcaaagta gaaaccctcc agtgtttggt gttgtgtaga gaataggaca 3540
tagggtaaaag aggccaaagc gcctgtagtt agtagagaag aatggatgtg gttcttcttg 3600
tgtatttatt tgtatcataa acacttgga caacaaagac cataagcatc atttagcagt 3660
tgtagccatt ttctagttaa ctcatgtaaa caagtaagag taacataaca gtattaccct 3720
ttcactgttc tcacaggaca tgtacctaat tatggtactt atttatgtag tcaactgtatt 3780
tctggatttt taaattaata aaaaagttaa ttttgaaaaa tcaaaaaaaa aaaaaaaaaa 3840
aaaaaaaaaa aaaaaaaaaa a

```

<210> 76

<211> 457

<212> PRT

<213> Homo sapiens

<400> 76

Met Arg Lys Lys Trp Lys Met Gly Gly Met Lys Tyr Ile Phe Ser Leu
1 5 10 15

Leu Phe Phe Leu Leu Glu Gly Gly Lys Thr Glu Gln Val Lys His
20 25 30

Ser Glu Thr Tyr Cys Met Phe Gln Asp Lys Lys Tyr Arg Val Gly Glu
35 40 45

Arg Trp His Pro Tyr Leu Glu Pro Tyr Gly Leu Val Tyr Cys Val Asn
50 55 60

Cys Ile Cys Ser Glu Asn Gly Asn Val Leu Cys Ser Arg Val Arg Cys

```

65              70              75              80
Pro Asn Val His Cys85 Leu Ser Pro Val His90 Ile Pro His Leu Cys95 Cys
Pro Arg Cys100 Pro Asp Ser Leu Pro105 Val Asn Asn Lys110 Val Thr Ser
Lys Ser Cys115 Glu Tyr Asn Gly120 Thr Tyr Gln His125 Gly Glu Leu Phe
Val130 Ala Glu Gly Leu Phe135 Gln Asn Arg Gln Pro140 Asn Gln Cys Thr Gln
Cys145 Ser Cys Ser Glu Gly150 Asn Val Tyr Cys155 Gly Leu Lys Thr Cys160 Pro
Lys Leu Thr Cys165 Ala Phe Pro Val Ser170 Val Pro Asp Ser Cys175 Cys Arg
Val Cys Arg Gly180 Asp Gly Glu Leu Ser185 Trp Glu His Ser190 Asp Gly Asp
Ile Phe Arg195 Gln Pro Ala Asn200 Arg Glu Ala Arg His205 Ser Tyr His Arg
Ser His210 Tyr Asp Pro Pro215 Ser Arg Gln Ala Gly220 Gly Leu Ser Arg
Phe225 Pro Gly Ala Arg Ser230 His Arg Gly Ala235 Leu Met Asp Ser Gln240 Gln
Ala Ser Gly Thr Ile245 Val Gln Ile Val250 Ile Asn Asn Lys His255 Lys His
Gly Gln Val Cys260 Val Ser Asn Gly265 Lys Thr Tyr Ser His270 Gly Glu Ser
Trp His Pro275 Asn Leu Arg Ala Phe280 Gly Ile Val Glu Cys285 Val Leu Cys
Thr Cys290 Asn Val Thr Lys295 Gln Glu Cys Lys Lys300 Ile His Cys Pro Asn
Arg305 Tyr Pro Cys Lys Tyr310 Pro Gln Lys Ile Asp315 Gly Lys Cys Cys320 Lys
Val Cys Pro Gly Lys325 Lys Ala Lys Glu330 Glu Leu Pro Gly Gln Ser335 Phe
Asp Asn Lys Gly340 Tyr Phe Cys Gly345 Glu Glu Thr Met Pro350 Val Tyr Glu
Ser Val Phe355 Met Glu Asp Gly360 Glu Thr Thr Arg Lys365 Ile Ala Leu Glu
Thr Glu Arg Pro Pro Gln Val375 Glu Val His Val380 Trp Thr Ile Arg Lys
Gly385 Ile Leu Gln His Phe390 His Ile Glu Lys395 Ile Ser Lys Arg Met400 Phe
Glu Glu Leu Pro His Phe Lys Leu Val Thr Arg Thr Thr Leu Ser Gln

```

6069-74A.SEQ.txt

405

410

415

Trp Lys Ile Phe Thr Glu Gly Glu Ala Gln Ile Ser Gln Met Cys Ser
 420 425 430

Ser Arg Val Cys Arg Thr Glu Leu Glu Asp Leu Val Lys Val Leu Tyr
 435 440 445

Leu Glu Arg Ser Glu Lys Gly His Cys
 450 455

<210> 77

<211> 2050

<212> DNA

<213> Homo sapiens

<400> 77

```

gtgctctgag aagccggact acgcggcagc ggctcttcaa agcggagccg ggagtttttg 60
ctacagtttt cgccaccatg agtcgcagct ataatgatga gctgcagttc ttggagaaga 120
tcaataaaaa ctgctggagg atcaagaagg gcttcgtgcc caacatgcag gttgaagggtg 180
ttttctatgt gaatgatgct ctggagaaat tgatgtttga ggaattaagg aatgcctgtc 240
gagggtgggtg tgttgggtggc ttcctgccag ccatgaaaca gattggcaat gtggcagccc 300
tgcctggaat tgttcatcga tctattgggc ttcctgatgt ccattcagga tatgggtttg 360
ctattgggaa catggcagcc ttgatatga atgacctga agcagtagta tcccaggtg 420
gtgtcgggtt tgacatcaac tgtggtgtcc gcttgctaag aaccaattta gatgaaagtg 480
atgtccagcc tgtgaaggag caacttgccc aagctatgtt tgaccacatt cctgttgggg 540
tgggggtcaaa aggtgtcatc ccaatgaatg ccaagacctt ggaggaggcc ttggagatgg 600
gggtggactg gtccttaaga gaagggtatg cctgggctga agacaaggag cactgcgagg 660
agtacggaag gatgctgcag gctgaccca ataaagtctc tgcaaggcg aagaaaagag 720
gccttcctca gttggggacc ctgggagcag gcaaccatta tgcagaaatc caggttgtgg 780
atgagatttt caatgagtat gctgctaata aatgggcat cgaccataag ggacaggtgt 840
gtgtgatgat ccacagtgga agcagaggct tgggccacca agtagccaca gatgcgctgg 900
tagctatgga gaaggccatg aagagagaca agattatagt caatgatcgg cagttggctt 960
gtgctcgaat cgcttcccca gaggggtcaag actatctgaa ggggaatggca gctgctggga 1020
actatgcctg ggtcaaccgc tcttccatga ccttcttaac ccgtcaggct ttcgccaagg 1080
tcttcaacac aacccctgat gacttggacc tacatgtgat ctatgatgtt tctcacaaca 1140
ttgccaagt ggagcagcat gtggtggacg gaaaggaacg gacactgtta gtacacagga 1200
agggatccac ccgcgctttc cctcctcacc atcccctcat tgctgttgat taccaactca 1260
ctggacagcc agtgtcatt ggtggcacca tgggaacctg tagttatgtt ctactggca 1320
ctgaacaggg catgactgag acctttggaa caacctgtca tggagcgggc cgtgcattgt 1380
cccagcaaa atctcgacgt aatttagatt tccaggatgt cttagacaaa ttggcagata 1440
tgggaattgc gatccgtgtt gcctcaccca aactggttat ggaagaggct cctgagtcct 1500
ataagaatgt gacagatgtg gtaaatacct gccatgatgc tggaaatcagc aagaaagcca 1560
ttaaactgag accaattgct gtgatcaaag gatagaacct tggacagcag ggctgcctga 1620
caccaccaac cctctctgaa gtggaagtgg actgacatgc tcttctgaca tcagactcaa 1680
ggcgggacaa gttgcaaagt gtgcagctgt aactgctcac gccaaaatgg ctgatgggga 1740
ggctgctgct ttcaggggcc cgtgcttcta aaataacctt ccaggaagag gcacattgcc 1800
caccittgga aagggaggaa tatgccttct ccttggttgt tccacagagt tttaggaaaa 1860
tctgttaggg atgggtagat gtcaaaactgc cttacgcagt catactgac tttagccatc 1920
agattgatct tcttcacacc aagctctgtt tacattccga gaggtgtcat gaagaaagtt 1980
ctgttcaata agggaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa 2040
aaaaaaaaaa

```

<210> 78

<211> 505

<212> PRT

<213> Homo sapiens

<400> 78

Met Ser Arg Ser Tyr Asn Asp Glu Leu Gln Phe Leu Glu Lys Ile Asn
 1 5 10 15

6069-74A.SEQ.txt

Lys Asn Cys Trp Arg Ile Lys Lys Gly Phe Val Pro Asn Met Gln Val
 20 25 30
 Glu Gly Val Phe Tyr Val Asn Asp Ala Leu Glu Lys Leu Met Phe Glu
 35 40 45
 Glu Leu Arg Asn Ala Cys Arg Gly Gly Gly Val Gly Gly Phe Leu Pro
 50 55 60
 Ala Met Lys Gln Ile Gly Asn Val Ala Ala Leu Pro Gly Ile Val His
 65 70 75 80
 Arg Ser Ile Gly Leu Pro Asp Val His Ser Gly Tyr Gly Phe Ala Ile
 85 90 95
 Gly Asn Met Ala Ala Phe Asp Met Asn Asp Pro Glu Ala Val Val Ser
 100 105 110
 Pro Gly Gly Val Gly Phe Asp Ile Asn Cys Gly Val Arg Leu Leu Arg
 115 120 125
 Thr Asn Leu Asp Glu Ser Asp Val Gln Pro Val Lys Glu Gln Leu Ala
 130 135 140
 Gln Ala Met Phe Asp His Ile Pro Val Gly Val Gly Ser Lys Gly Val
 145 150 155 160
 Ile Pro Met Asn Ala Lys Asp Leu Glu Glu Ala Leu Glu Met Gly Val
 165 170 175
 Asp Trp Ser Leu Arg Glu Gly Tyr Ala Trp Ala Glu Asp Lys Glu His
 180 185 190
 Cys Glu Glu Tyr Gly Arg Met Leu Gln Ala Asp Pro Asn Lys Val Ser
 195 200 205
 Ala Arg Ala Lys Lys Arg Gly Leu Pro Gln Leu Gly Thr Leu Gly Ala
 210 215 220
 Gly Asn His Tyr Ala Glu Ile Gln Val Val Asp Glu Ile Phe Asn Glu
 225 230 235 240
 Tyr Ala Ala Lys Lys Met Gly Ile Asp His Lys Gly Gln Val Cys Val
 245 250 255
 Met Ile His Ser Gly Ser Arg Gly Leu Gly His Gln Val Ala Thr Asp
 260 265 270
 Ala Leu Val Ala Met Glu Lys Ala Met Lys Arg Asp Lys Ile Ile Val
 275 280 285
 Asn Asp Arg Gln Leu Ala Cys Ala Arg Ile Ala Ser Pro Glu Gly Gln
 290 295 300
 Asp Tyr Leu Lys Gly Met Ala Ala Ala Gly Asn Tyr Ala Trp Val Asn
 305 310 315 320
 Arg Ser Ser Met Thr Phe Leu Thr Arg Gln Ala Phe Ala Lys Val Phe
 325 330 335
 Asn Thr Thr Pro Asp Asp Leu Asp Leu His Val Ile Tyr Asp Val Ser
 340 345 350

6069-74A.SEQ.txt

His Asn Ile Ala Lys Val Glu Gln His Val Val Asp Gly Lys Glu Arg
 355 360 365
 Thr Leu Leu Val His Arg Lys Gly Ser Thr Arg Ala Phe Pro Pro His
 370 375 380
 His Pro Leu Ile Ala Val Asp Tyr Gln Leu Thr Gly Gln Pro Val Leu
 385 390 395 400
 Ile Gly Gly Thr Met Gly Thr Cys Ser Tyr Val Leu Thr Gly Thr Glu
 405 410 415
 Gln Gly Met Thr Glu Thr Phe Gly Thr Thr Cys His Gly Ala Gly Arg
 420 425 430
 Ala Leu Ser Arg Ala Lys Ser Arg Arg Asn Leu Asp Phe Gln Asp Val
 435 440 445
 Leu Asp Lys Leu Ala Asp Met Gly Ile Ala Ile Arg Val Ala Ser Pro
 450 455 460
 Lys Leu Val Met Glu Glu Ala Pro Glu Ser Tyr Lys Asn Val Thr Asp
 465 470 475 480
 Val Val Asn Thr Cys His Asp Ala Gly Ile Ser Lys Lys Ala Ile Lys
 485 490 495
 Leu Arg Pro Ile Ala Val Ile Lys Gly
 500 505

<210> 79
 <211> 1178
 <212> DNA
 <213> Homo sapiens

<400> 79
 gccaaatgtc cgggtcaagat gtcacacagc tccagtggct cagccagtct gagtcaggtt 60
 tctccaggga aagaaacaga tcaaactgaa accgtgtcag ttcagtcttc ggtattgggg 120
 aagggtgtaa aacatcgacc cccaccaatc aaacttccct caagctcagg aaatagttcc 180
 tcaggtaact attttacacc acaacagaca agcagctttc tcaaactctc aactcctcct 240
 ccttcttcta agccatcaag tattcctcgg aaatcatctg tggatctcaa tcaagtttagc 300
 atgcttttct cagctgcccct atcacctgcc agctcatcac aaagaaccac ggccacccag 360
 gtcattggcaa actctgctgg acttaacttc atcaatgtag tgggctctgt ttgtggggcc 420
 caggctttga tgagtgggtc aaaccccatg ctgggctgta acactgggtc cataactcct 480
 gcaggaataa acctgagcgg ctttctaccc tcaggagggtc tgctaccaa tgcactgccc 540
 agtgcaatgc aggcagcttc tcaagcaggt gttccatttg gtttaaaaaa tacttcaagt 600
 cttaggccct taaatctact ccagcttcca ggtggttcac ttatttttaa cactctgcag 660
 cagcagcaac agcagctctc ccagtttaca ccacaacaac ctacagcagc cacaacttgt 720
 agtcctcaac agccagggga gcagggttct gagcaagggt caaccagtca agaacaggcc 780
 ttatctgctc agcaagctgc tgttattaac cttactggag taggaagttt tatgcagtca 840
 caggcagctg cagttgcat tcttgagca tcaaatggct atggcagcag cagcagcaca 900
 aacagctcag ctacatcatc atcggcatac aggcagccag tcaaaaagta aaatgaagag 960
 aggcattgcca accactccaa aattttgagt cttgcattac tttttgttcc ttttttaaaa 1020
 acacaagagc actgaatcaa aagaattgag tttctacttt ttgttttttt taatgtgtca 1080
 gtatttttaca ttgctagatg tacaaaactt atacagaagc acaaccctat catttttaaa 1140
 taaaaacagg gaaatggttt aacaaaaaaa aaaaaaaa 1178

<210> 80
 <211> 310
 <212> PRT
 <213> Homo sapiens

6069-74A.SEQ.txt

<400> 80

Met Ser His Ser Ser Ser Gly Ser Ala Ser Leu Ser Gln Val Ser Pro
 1 5 10 15
 Gly Lys Glu Thr Asp Gln Thr Glu Thr Val Ser Val Gln Ser Ser Val
 20 25 30
 Leu Gly Lys Gly Val Lys His Arg Pro Pro Pro Ile Lys Leu Pro Ser
 35 40 45
 Ser Ser Gly Asn Ser Ser Ser Gly Asn Tyr Phe Thr Pro Gln Gln Thr
 50 55 60
 Ser Ser Phe Leu Lys Ser Pro Thr Pro Pro Pro Ser Ser Lys Pro Ser
 65 70 75 80
 Ser Ile Pro Arg Lys Ser Ser Val Asp Leu Asn Gln Val Ser Met Leu
 85 90 95
 Ser Pro Ala Ala Leu Ser Pro Ala Ser Ser Ser Gln Arg Thr Thr Ala
 100 105 110
 Thr Gln Val Met Ala Asn Ser Ala Gly Leu Asn Phe Ile Asn Val Val
 115 120 125
 Gly Ser Val Cys Gly Ala Gln Ala Leu Met Ser Gly Ser Asn Pro Met
 130 135 140
 Leu Gly Cys Asn Thr Gly Ala Ile Thr Pro Ala Gly Ile Asn Leu Ser
 145 150 155 160
 Gly Leu Leu Pro Ser Gly Gly Leu Leu Pro Asn Ala Leu Pro Ser Ala
 165 170 175
 Met Gln Ala Ala Ser Gln Ala Gly Val Pro Phe Gly Leu Lys Asn Thr
 180 185 190
 Ser Ser Leu Arg Pro Leu Asn Leu Leu Gln Leu Pro Gly Gly Ser Leu
 195 200 205
 Ile Phe Asn Thr Leu Gln Gln Gln Gln Gln Gln Leu Ser Gln Phe Thr
 210 215 220
 Pro Gln Gln Pro Gln Gln Pro Thr Thr Cys Ser Pro Gln Gln Pro Gly
 225 230 235 240
 Glu Gln Gly Ser Glu Gln Gly Ser Thr Ser Gln Glu Gln Ala Leu Ser
 245 250 255
 Ala Gln Gln Ala Ala Val Ile Asn Leu Thr Gly Val Gly Ser Phe Met
 260 265 270
 Gln Ser Gln Ala Ala Ala Val Ala Ile Leu Ala Ala Ser Asn Gly Tyr
 275 280 285
 Gly Ser Ser Ser Ser Thr Asn Ser Ser Ala Thr Ser Ser Ser Ala Tyr
 290 295 300
 Arg Gln Pro Val Lys Lys
 305 310

<210> 81

6069-74A.SEQ.txt

<211> 641
 <212> DNA
 <213> Homo sapiens

<400> 81
 gacgatgtca ccctgtcctc cctccttgct tcttgctctg ctaactcaac tctgccttcc 60
 tctttttcat tcttctactc tgccctatat ggaggacaaa tggacaccag ggggtgctaac 120
 cttattgggtg cctgccccag cctaccccag gtgccagcag actctcgtgc acaggaggct 180
 cccacagtta tggagccagg aaagaatttc tctgcactgg atggactgta tattgagatt 240
 aaaaattata ttctttatat tcttgcttat atcaatgctc tctctgtaaa acctcttcct 300
 agcctcattt ctctcaactg atcttggtta ggcgttggtat tctttttatt tactctttgc 360
 ttgactgctt cctcctaacc ctctaccac tagcactcta ctctctaaag ctgtttgtgtc 420
 attaacictg ttgatcaac tctctgggaa aagattctgt taatgtaagt gcacttactc 480
 cctggatggt gtcactagtc tagtggcttt tgctaaataa acctttctta tttctaaaaa 540
 aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa 600
 aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa a a 641

<210> 82
 <211> 94
 <212> PRT
 <213> Homo sapiens

<400> 82
 Met Ser Pro Cys Pro Pro Ser Leu Leu Leu Ala Leu Leu Thr Gln Leu
 1 5 10 15
 Cys Leu Pro Leu Phe His Ser Ser Thr Leu Pro Tyr Met Glu Asp Lys
 20 25 30
 Trp Thr Pro Gly Val Leu Thr Leu Leu Val Pro Ala Pro Ala Tyr Pro
 35 40 45
 Arg Cys Gln Gln Thr Leu Val His Arg Arg Leu Pro Gln Leu Trp Ser
 50 55 60
 Gln Glu Arg Ile Ser Leu His Trp Met Asp Cys Ile Leu Arg Leu Lys
 65 70 75 80
 Ile Ile Phe Leu Ile Phe Leu Leu Ile Ser Met Leu Ser Leu
 85 90

<210> 83
 <211> 832
 <212> DNA
 <213> Homo sapiens

<400> 83
 ccttgcatga ccttcttctg ccctatctgc tgctaggtgt aaacctgttt tttttcaccc 60
 tgacttggtg aaccaatcct ggcattataa caaaagcaaa tgaattatta tttcttcatg 120
 tttatgaatt tgatgaagtg atgtttccaa agaacgtgag gtgctctact tgtgatttaa 180
 ggaaaccagc tcgatccaag cactgcagtg tgtgtaactg gtgtgtgcac cgtttcgacc 240
 atcactgtgt ttgggtgaac aactgcatcg gggcctggaa catcaggtag ttcctcatct 300
 acgtcttgac ctigacggcc tcggctgccca ccgtcgccat tgtgagcacc acttttctgg 360
 tccacttggt ggtgatgtca gatttatacc aggagactta catcgatgac cttggacacc 420
 ttccatgtta tggacacggg ctttcttatt cagtacctgt tcctgacttt tccacggatt 480
 gtcttcatgc tgggctttgt cgtggttctg agcttcctcc tgggtggcta cctgttggtt 540
 gtcctgtatc tggcggccac caaccagact actaacgagt ggtacagagg tgactgggccc 600
 tggtgccagc gttgtcccct tgtggcctgg cctccgtcag cagagcccca agtccaccgg 660
 aacattcact cccatgggct tcggagcaac cttaagaga tctttctacc tgcctttcca 720
 tgtcatgaga ggaagaacaa agaatgacaa gtgtatgact gcctttgagc tgtagtcccc 780
 gttattttac acatgtggat cctcgttttc ctcccgtatt aattctagac ct 832

6069-74A.SEQ.txt

<210> 84
 <211> 144
 <212> PRT
 <213> Homo sapiens

<400> 84
 Met Phe Pro Lys Asn Val Arg Cys Ser Thr Cys Asp Leu Arg Lys Pro
 1 5 10 15
 Ala Arg Ser Lys His Cys Ser Val Cys Asn Trp Cys Val His Arg Phe
 20 25 30
 Asp His His Cys Val Trp Val Asn Asn Cys Ile Gly Ala Trp Asn Ile
 35 40 45
 Arg Tyr Phe Leu Ile Tyr Val Leu Thr Leu Thr Ala Ser Ala Ala Thr
 50 55 60
 Val Ala Ile Val Ser Thr Thr Phe Leu Val His Leu Val Val Met Ser
 65 70 75 80
 Asp Leu Tyr Gln Glu Thr Tyr Ile Asp Asp Leu Gly His Leu Pro Cys
 85 90 95
 Tyr Gly His Gly Leu Ser Tyr Ser Val Pro Val Pro Asp Phe Ser Thr
 100 105 110
 Asp Cys Leu His Ala Gly Leu Cys Arg Gly Ser Glu Leu Pro Pro Gly
 115 120 125
 Trp Leu Pro Val Val Cys Pro Val Ser Gly Gly His Gln Pro Asp Tyr
 130 135 140

<210> 85
 <211> 3790
 <212> DNA
 <213> Homo sapiens

<400> 85
 aacggcagtc tcaatctggc cccacacctt tcttgggctt gtaggaaggt ggacatgggc 60
 tcccgagac aagacaagtg atatgttgaa ctgttcggtg gctggaatca actgctcctg 120
 gactgacctt aggcagtggt ttatcagaac tttagccagg ccagccaagc aggcacagat 180
 gctctgctat gaaatgccac gcaggcagag actgacaagc ggttaggaact gagctttccc 240
 cttggactgc tgcttctctg tgtgttcagg ggaggggggc actttctggc aactctgctg 300
 ctgctgctgc tgctgctgct acttcagctt cctctccact caaggtaagc aggctaaggg 360
 agggcaggct gctagggaaa gctttgtacc atgaacagga tccgaaagt tttccgagga 420
 agtgggcgag tcttggcatt tatctttgta gcttctgtca tctggctcct ctttgacatg 480
 gcagctctcc gcctctcatt cagttagatc aacactcggg tcatcaagga agacattgtg 540
 aggagggagc ggataggatt cagagtccag ccagaccaag gaaaaatttt ttacagcagc 600
 ataaaagaga tgaaacctcc cctaagggga catgggaaag gggcatgggg caaagagaaat 660
 gttagaaaaa ctgaggagag tgtgtcctaa gttgaggtgg acttggaaca aaccagagag 720
 gaaagaaaaa tgcagaatgc cctgggaagg ggcaagggtg tgccgttgtg gcacccctgca 780
 catctgcaga cctcctctgt gactcctaac aagcagaaga cagacgggag aggcacaaa 840
 cctgaagcct cctctcacca ggggacacca aagcaaacga cagctcaggg ggctccaaag 900
 acctcatcca tagcagcaaa aggaactcag gtatgcaaaa tatcagtaca catgggacgt 960
 gtcagtttaa aacaggagcc ccggaagagt catagtccca gcagtgcac atcaaaaacta 1020
 gcagctgaaa gggacttgaa tgtgaccatc agtcttagta ctgatagacc aaagcagcga 1080
 tcacaggcag tagcaaacga gagggcacac cctgccagca cagcagtgcc gaagtctggg 1140
 gaagccatgg ccttaaacaa aactaagact cagagcaaaag aagtcaatgc aaataaacac 1200
 aaagccaata cgagctcttc ttttcctaag ttactgtgca attcaaatcg ctttaaggaa 1260
 caatctatta atgagacacc tttgggaagt ttgtcaaagg atgatggagc tagaggggct 1320
 catgggaaga aactcaattt ctctgaaagc catcttgtga ttataaccaa agaggaagag 1380

6069-74A.SEQ.txt

```

caaaaggcag accccaaaga ggtctctaata tctaaaacca aaacaatat tcctaaagta 1440
ttgggtaaaa gccaaagtaa acacatttcc aggaatagaa gtgagatgtc ttcctcttca 1500
cttgctccac atagagtgcc actgtcccaa actaaccatg ctttaactgg agggctagag 1560
ccagcaaaaa tcaacataac tgccaaagcc cctctacag aatacaacca gagtcatata 1620
aaagcccttt tacctgaaga cagtggaaag caccaggtgt taagaattga tgtgacactt 1680
tctccaaggg accccaaagc tccagggcag tttgggcgtc ctgtagttgt ccccatgga 1740
aaggagaagg aggcagaaag aagatggaaa gaaggaaact tcaatgtcta ccttagcgat 1800
ttgatccagc tggatagagc cattgaagac accagacctg ctggatgtgc agagcagcta 1860
gttcacaata acctcccaac caccagtgtc atcatgtgtc ttgtggatga agtgtggtcc 1920
actctcctga gatctgttca cagtgtcatc aatcgctctc ctccacacct catcaaggag 1980
attctgtctg tagatgactt cagcaccaaa gactatctaa aagataattt ggataaatac 2040
atgtcccagt ttccaaaagt tcggattctt cgcccaaaag agagacatgg cttataaagg 2100
gccaggctgg caggagcaca gaatgcaaca ggtgatgtgt tgacattttt agattctcat 2160
gtggaatgta acgttgggtg gttggaaact cttctggaaa gagtttattt aagtagaaaag 2220
aaagtggcct gtccagtaat cgaagtcatac aatgataagg atatgagtta catgacagt 2280
gataactttc aaagaggcat ctttgtgtgg cccatgaact ttggttgagg aacaattcct 2340
ccagatgtca ttgcaaaaaa cagaattaaa gaaactgata caataagggt cctgtcatg 2400
gctgggtggat tgttttctat tgacaaaagt tacttttttg aacttgggaa atacgacct 2460
ggccttgatg tttgggggtg ggaaaatatg gagctctcat tcaagggtgt gatgtgtggt 2520
ggtgaaaatt agatcattcc ctgctcccga gtgggcccata tattcagaaa tgacaatcca 2580
tattccttcc ccaaagaccg gatgaagaca gtggagcggg acttgggtgc gggtgccgag 2640
gtctggctgg atgagtataa ggagctgttc tatggccatg gagaccacct catcgacca 2700
gggctagatg ttggcaacct caccagcaa agggagctgc gaaagaaact gaagtgc 2760
agtttcaaat ggtacttgga gaatgtcttt cctgacttaa gggctcccat tgtgagagct 2820
agtgggtgtc ttattaatgt ggctttgggt aaatgcattt ccattgaaaa cactacagtc 2880
attctggaag actgcgatgg gagcaagag cttcaacaat ttaattacac ctgggtaaga 2940
cttattaaat gtggagaatg gtgtatagcc cccatccctg ataaaggagc cgtaaggctg 3000
cacccttgatg ataacagaaa caaagggcta aaatggctgc ataaatcaac atcagctttt 3060
catccagaac tggatgaatc cattgttttt gaaaacaatc agcaattatt atgcttgga 3120
ggaaattttt ctcaaaaagt cctgaaagta gctgcctgtg acccagtga gccatatcaa 3180
aagtggaaat ttgaaaaata ttatgaagcc tgaagtgtaa ctgatgtttt tatatagtaa 3240
accattaaa tactgtgaaa ataacactga acttgggaaac tatatttctc agcggtagt 3300
taaattttca attttaataa catttgaatg gaagattttt tataaatcac aatatttga 3360
ataccaaaag atgactcagg aaaacagtcc aacattggac tgaagtcctt cttcggaact 3420
gggtggcctt tgaattgcct gctttccacc ctatgctaga cctcatcatg caaatttccc 3480
tgtgaaagct aacaggtaac tggaaatgaa gacagaagga cttgagaaag catgaggata 3540
ttccaatga ctatgtttgg taataatcag ctcttctggc ccacaagtag gaatgatcaa 3600
tgagaactta acttagtcct ttatttgggg attttttcat caaacaataa tttcttgagt 3660
tcttatggct agaagacctc agatgccac agctgtcacg tttgtgaaat ccctccagac 3720
tacatgcatg cttacctaac agtttgaaat agtattgatc tactgctggt aaaaaaaaaa 3780
aaaaaaaaaa 3790

```

<210> 86

<211> 940

<212> PRT

<213> Homo sapiens

<400> 86

Met Asn Arg Ile Arg Lys Phe Phe Arg Gly Ser Gly Arg Val Leu Ala
1 5 10 15

Phe Ile Phe Val Ala Ser Val Ile Trp Leu Leu Phe Asp Met Ala Ala
20 25 30

Leu Arg Leu Ser Phe Ser Glu Ile Asn Thr Arg Val Ile Lys Glu Asp
35 40 45

Ile Val Arg Arg Glu Arg Ile Gly Phe Arg Val Gln Pro Asp Gln Gly
50 55 60

Lys Ile Phe Tyr Ser Ser Ile Lys Glu Met Lys Pro Pro Leu Arg Gly
65 70 75 80

6069-74A.SEQ.txt

His Gly Lys Gly Ala Trp Gly Lys Glu Asn Val Arg Lys Thr Glu Glu
 85 90
 Ser Val Leu Lys Val Glu Val Asp Leu Asp Gln Thr Gln Arg Glu Arg
 100 105 110
 Lys Met Gln Asn Ala Leu Gly Arg Gly Lys Val Val Pro Leu Trp His
 115 120 125
 Pro Ala His Leu Gln Thr Leu Pro Val Thr Pro Asn Lys Gln Lys Thr
 130 135 140
 Asp Gly Arg Gly Thr Lys Pro Glu Ala Ser Ser His Gln Gly Thr Pro
 145 150 155 160
 Lys Gln Thr Thr Ala Gln Gly Ala Pro Lys Thr Ser Phe Ile Ala Ala
 165 170 175
 Lys Gly Thr Gln Val Val Lys Ile Ser Val His Met Gly Arg Val Ser
 180 185 190
 Leu Lys Gln Glu Pro Arg Lys Ser His Ser Pro Ser Ser Asp Thr Ser
 195 200 205
 Lys Leu Ala Ala Glu Arg Asp Leu Asn Val Thr Ile Ser Leu Ser Thr
 210 215 220
 Asp Arg Pro Lys Gln Arg Ser Gln Ala Val Ala Asn Glu Arg Ala His
 225 230 235 240
 Pro Ala Ser Thr Ala Val Pro Lys Ser Gly Glu Ala Met Ala Leu Asn
 245 250 255
 Lys Thr Lys Thr Gln Ser Lys Glu Val Asn Ala Asn Lys His Lys Ala
 260 265 270
 Asn Thr Ser Leu Pro Phe Pro Lys Phe Thr Val Asn Ser Asn Arg Leu
 275 280 285
 Arg Lys Gln Ser Ile Asn Glu Thr Pro Leu Gly Ser Leu Ser Lys Asp
 290 295 300
 Asp Gly Ala Arg Gly Ala His Gly Lys Lys Leu Asn Phe Ser Glu Ser
 305 310 315 320
 His Leu Val Ile Ile Thr Lys Glu Glu Glu Gln Lys Ala Asp Pro Lys
 325 330 335
 Glu Val Ser Asn Ser Lys Thr Lys Thr Ile Phe Pro Lys Val Leu Gly
 340 345 350
 Lys Ser Gln Ser Lys His Ile Ser Arg Asn Arg Ser Glu Met Ser Ser
 355 360 365
 Ser Ser Leu Ala Pro His Arg Val Pro Leu Ser Gln Thr Asn His Ala
 370 375 380
 Leu Thr Gly Gly Leu Glu Pro Ala Lys Ile Asn Ile Thr Ala Lys Ala
 385 390 395 400
 Pro Ser Thr Glu Tyr Asn Gln Ser His Ile Lys Ala Leu Leu Pro Glu
 405 410 415

6069-74A.SEQ.txt

Asp Ser Gly Thr His Gln Val Leu Arg Ile Asp Val Thr Leu Ser Pro
 420 425 430
 Arg Asp Pro Lys Ala Pro Gly Gln Phe Gly Arg Pro Val Val Val Pro
 435 440 445
 His Gly Lys Glu Lys Glu Ala Glu Arg Arg Trp Lys Glu Gly Asn Phe
 450 455 460
 Asn Val Tyr Leu Ser Asp Leu Ile Pro Val Asp Arg Ala Ile Glu Asp
 465 470 475 480
 Thr Arg Pro Ala Gly Cys Ala Glu Gln Leu Val His Asn Asn Leu Pro
 485 490 495
 Thr Thr Ser Val Ile Met Cys Phe Val Asp Glu Val Trp Ser Thr Leu
 500 505 510
 Leu Arg Ser Val His Ser Val Ile Asn Arg Ser Pro Pro His Leu Ile
 515 520 525
 Lys Glu Ile Leu Leu Val Asp Asp Phe Ser Thr Lys Asp Tyr Leu Lys
 530 535 540
 Asp Asn Leu Asp Lys Tyr Met Ser Gln Phe Pro Lys Val Arg Ile Leu
 545 550 555 560
 Arg Leu Lys Glu Arg His Gly Leu Ile Arg Ala Arg Leu Ala Gly Ala
 565 570 575
 Gln Asn Ala Thr Gly Asp Val Leu Thr Phe Leu Asp Ser His Val Glu
 580 585 590
 Cys Asn Val Gly Trp Leu Glu Pro Leu Leu Glu Arg Val Tyr Leu Ser
 595 600 605
 Arg Lys Lys Val Ala Cys Pro Val Ile Glu Val Ile Asn Asp Lys Asp
 610 615 620
 Met Ser Tyr Met Thr Val Asp Asn Phe Gln Arg Gly Ile Phe Val Trp
 625 630 635 640
 Pro Met Asn Phe Gly Trp Arg Thr Ile Pro Pro Asp Val Ile Ala Lys
 645 650 655
 Asn Arg Ile Lys Glu Thr Asp Thr Ile Arg Cys Pro Val Met Ala Gly
 660 665 670
 Gly Leu Phe Ser Ile Asp Lys Ser Tyr Phe Phe Glu Leu Gly Thr Tyr
 675 680 685
 Asp Pro Gly Leu Asp Val Trp Gly Gly Glu Asn Met Glu Leu Ser Phe
 690 695 700
 Lys Val Trp Met Cys Gly Gly Glu Ile Glu Ile Ile Pro Cys Ser Arg
 705 710 715 720
 Val Gly His Ile Phe Arg Asn Asp Asn Pro Tyr Ser Phe Pro Lys Asp
 725 730 735
 Arg Met Lys Thr Val Glu Arg Asn Leu Val Arg Val Ala Glu Val Trp
 740 745 750

6069-74A.SEQ.txt

Leu Asp Glu Tyr Lys Glu Leu Phe Tyr Gly His Gly Asp His Leu Ile
 755 760 765
 Asp Gln Gly Leu Asp Val Gly Asn Leu Thr Gln Gln Arg Glu Leu Arg
 770 775 780
 Lys Lys Leu Lys Cys Lys Ser Phe Lys Trp Tyr Leu Glu Asn Val Phe
 785 790 795 800
 Pro Asp Leu Arg Ala Pro Ile Val Arg Ala Ser Gly Val Leu Ile Asn
 805 810 815
 Val Ala Leu Gly Lys Cys Ile Ser Ile Glu Asn Thr Thr Val Ile Leu
 820 825 830
 Glu Asp Cys Asp Gly Ser Lys Glu Leu Gln Gln Phe Asn Tyr Thr Trp
 835 840 845
 Leu Arg Leu Ile Lys Cys Gly Glu Trp Cys Ile Ala Pro Ile Pro Asp
 850 855 860
 Lys Gly Ala Val Arg Leu His Pro Cys Asp Asn Arg Asn Lys Gly Leu
 865 870 875 880
 Lys Trp Leu His Lys Ser Thr Ser Val Phe His Pro Glu Leu Val Asn
 885 890 895
 His Ile Val Phe Glu Asn Asn Gln Gln Leu Leu Cys Leu Glu Gly Asn
 900 905 910
 Phe Ser Gln Lys Ile Leu Lys Val Ala Ala Cys Asp Pro Val Lys Pro
 915 920 925
 Tyr Gln Lys Trp Lys Phe Glu Lys Tyr Tyr Glu Ala
 930 935 940

<210> 87
 <211> 1200
 <212> DNA
 <213> Homo sapiens

<400> 87
 ggcttctcgg agcggcgctg ggcgaccgga gcagggtcga gatgtcctac atccccgggcc 60
 agccggtcac cgccgtggtg caaagagttg aaattcacaa gctgcgtcaa ggtgagaact 120
 taatcctggg tttcagcatt ggaggtggaa tcgaccagga tccttcccag aatcccttct 180
 atgaagacaa gacggacaag ggtatttatg tcacacgggt gtctgaagga ggccctgctg 240
 aaatcgctgg gctgcagatt ggagacaaga tcatgcaggt gaacggctgg gacatgacca 300
 tggtcacaca cgaccaggcc cgcaagcggc tcaccaagcg ctcgaggag gtggtgcgtc 360
 tgctgggtgac gcggcagtcg ctgcagaagg cgtgcagcag tcatgctgtc ctagcagcca 420
 ccaccatctg cgactcctgc ctgccgcctc tctgtacagt aacgccactt ccacactctg 480
 tccccatctg gcttctgctg accagctttc tctcctggac accgaggatt ggaaataagg 540
 gcctggagct gagtagtagc cagtctgctg tgaccacagg ctgaggtccg accctgctgc 600
 ttggccacag cagtggctgg gcaagtggga accactatct cttgggagcc cccaaaagct 660
 gggaaatgct ggaggaacca ggcctttccc gcttttgctt ggctgcaggg ttgggctccg 720
 cccctgcccc ccagccttgg tgtgtccaca ccgcagtgtc tctgccccctc gggggactgg 780
 acacacatcc tgccagaggc gctacgaagc tttgcccaga tgaagccagg tgggctccgc 840
 gttcactccc actctcccga ggggtgctgg cctccccagg gtttgccttc ttacggattt 900
 agacgaggtt cgaggctcac ctatcagggc agctctcagg attgtcattt tcctctttgc 960
 ctgtgggttt aacttttcta tttttttaat cacaagtttg atacaaaatg tttttatcgt 1020
 actctttgga gatgccatt ctacttttga atttagcttt tactaattcg catctggaag 1080
 ctacgcaagt gcacaagcct tacttttggtt accgtggaaa ccactgccgc ccctcccgga 1140
 tgtggtgtgc tgaataaaaa tgctggaatt caaaaaaaaaa aaaaaaaaaa aaaaaaaaaa 1200

6069-74A.SEQ.txt

<210> 88
 <211> 286
 <212> PRT
 <213> Homo sapiens

<400> 88

```

Met Ser Tyr Ile Pro Gly Gln Pro Val Thr Ala Val Val Gln Arg Val
 1          5          10          15
Glu Ile His Lys Leu Arg Gln Gly Glu Asn Leu Ile Leu Gly Phe Ser
          20          25          30
Ile Gly Gly Gly Ile Asp Gln Asp Pro Ser Gln Asn Pro Phe Tyr Glu
          35          40          45
Asp Lys Thr Asp Lys Gly Ile Tyr Val Thr Arg Val Ser Glu Gly Gly
          50          55          60
Pro Ala Glu Ile Ala Gly Leu Gln Ile Gly Asp Lys Ile Met Gln Val
          65          70          75          80
Asn Gly Trp Asp Met Thr Met Val Thr His Asp Gln Ala Arg Lys Arg
          85          90          95
Leu Thr Lys Arg Ser Glu Glu Val Val Arg Leu Leu Val Thr Arg Gln
          100          105          110
Ser Leu Gln Lys Ala Cys Ser Ser His Ala Val Leu Ala Ala Thr Thr
          115          120          125
Ile Cys Asp Ser Cys Leu Pro Pro Leu Cys Thr Val Thr Pro Leu Pro
          130          135          140
His Ser Val Pro Ile Trp Leu Leu Leu Thr Ser Phe Leu Ser Trp Thr
          145          150          155          160
Pro Arg Ile Gly Asn Lys Gly Leu Glu Leu Ser Ser Ser Gln Ser Ala
          165          170          175
Val Thr Thr Gly Ser Gly Pro Thr Leu Leu Leu Gly His Ser Ser Gly
          180          185          190
Trp Ala Ser Gly Asn His Tyr Leu Leu Gly Ala Pro Lys Ser Trp Glu
          195          200          205
Met Leu Glu Glu Pro Gly Leu Ser Arg Phe Cys Leu Ala Ala Gly Leu
          210          215          220
Gly Ser Ala Pro Ala Pro Gln Pro Trp Cys Val His Thr Ala Val Leu
          225          230          235          240
Leu Pro Leu Gly Gly Leu Asp Thr His Pro Ala Arg Gly Ala Thr Lys
          245          250          255
Leu Cys Pro Asp Glu Ala Arg Trp Ala Pro Arg Ser Leu Pro Leu Ser
          260          265          270
Arg Gly Val Leu Ala Ser Pro Gly Phe Ala Phe Leu Arg Ile
          275          280          285

```

<210> 89

6069-74A.SEQ.txt

<211> 1023
<212> DNA
<213> Homo sapiens

<400> 89
ccaacatgga gactttgtac cgtgtcccgt tcttagtgct cgaatgtccc aacctgaagc 60
tgaagaagcc gccctgggtg cacatgccgt cggccatgac tgtgtatgct ctggtggtgg 120
tgtcttactt cctcatcacc ggaggaataa tttatgatgt tattgttgaa cctccaagtg 180
tcggttctat gactgatgaa catgggcatc agaggccagt agctttcttg gcctacagag 240
taaattggaca atatattatg gaaggacttg catccagctt cctatttaca atgggaggtt 300
taggtttcat aatcctggac cgatcgaatg caccaaatat cccaaaactc aatagattcc 360
ttcttctgtt cattggattc gtctgtgtcc tattgagttt tttcatggct agagtattca 420
tgagaatgaa actgccgggc tatctgatgg gttagagtgc ctttgagaag aaatcagtgg 480
atactggatt tgctcctgtc aatgaagtgt taaaggctgt accaatcctc taatatgaaa 540
tgtggaaaag aatgaagagc agcagtaaaa gaaatatcta gtgaaaaaac aggaagcgta 600
ttgaagcttg gactagaatt tcttcttggt attaaagaga caagtttatc acagaatttt 660
ttttcctgct ggcctattgc tataccaatg atgttgagtg gcattttctt tttagttttt 720
cattaaaata tattccatat ctacaactat aatatcaaat aaagtgatta ttttttaca 780
ccctcttaac attttttgga gatgacattt ctgattttca gaaattaaca taaaatccag 840
aagcaagatt ccgtaagctg agaactctgg acagttgatc agctttacct atgggtgctt 900
gcctttaact agagtgtgtg atggtagatt atttcagata tgtatgtaaa actgtttcct 960
gaacaataag atgtatgaac ggagcagaaa taaatacttt ttctaattaa aaaaaaaaaa 1020
aaa 1023

<210> 90
<211> 149
<212> PRT
<213> Homo sapiens

<400> 90
Met Glu Thr Leu Tyr Arg Val Pro Phe Leu Val Leu Glu Cys Pro Asn
1 5 10 15
Leu Lys Leu Lys Lys Pro Pro Trp Leu His Met Pro Ser Ala Met Thr
20 25 30
Val Tyr Ala Leu Val Val Val Ser Tyr Phe Leu Ile Thr Gly Gly Ile
35 40 45
Ile Tyr Asp Val Ile Val Glu Pro Pro Ser Val Gly Ser Met Thr Asp
50 55 60
Glu His Gly His Gln Arg Pro Val Ala Phe Leu Ala Tyr Arg Val Asn
65 70 75 80
Gly Gln Tyr Ile Met Glu Gly Leu Ala Ser Ser Phe Leu Phe Thr Met
85 90 95
Gly Gly Leu Gly Phe Ile Ile Leu Asp Arg Ser Asn Ala Pro Asn Ile
100 105 110
Pro Lys Leu Asn Arg Phe Leu Leu Leu Phe Ile Gly Phe Val Cys Val
115 120 125
Leu Leu Ser Phe Phe Met Ala Arg Val Phe Met Arg Met Lys Leu Pro
130 135 140
Gly Tyr Leu Met Gly
145

<210> 91
<211> 3901

<212> DNA
 <213> Homo sapiens

<400> 91

gccatggagg	gagtgagcgc	gctgctggcc	cgctgcccc	cggccggcct	ggccggcggc	60
ctgggggtca	cgccgtgcgc	cgccggccggc	gtgttgctct	accggatcgc	gcggaggatg	120
aagccaacgc	acacgatggt	caactgctgg	ttctgcaacc	aggatacgct	ggtgccctat	180
gggaaccgca	actgctggga	ctgtccccac	tgcgagcagt	acaacggctt	ccaggagaac	240
ggcgactaca	acaagccgat	ccccgcccag	tacttgagc	acctgaacca	cgtggtgagc	300
agcgcgcccc	gcctgcgcga	cccttcgcag	ccgcagcagt	gggtgagcag	ccaagtcctg	360
ctgtgcaaga	ggtgcaacca	ccaccagacc	accaagatca	agcagctggc	cgcccttcgt	420
ccccgcgagg	agggcaggta	tgacgaggag	gtcgagggtg	accggcatca	cctggagcag	480
atgtacaagc	tgtgccggcc	gtgccaagcg	gctgtggagt	actacatcaa	gcaccagaac	540
cgccagctgc	gcgccctggt	gctcagccac	cagttcaagc	gccgggaggc	cgaccagacc	600
cacgcacaga	acttctcctc	cgccgtgaag	tccccggctc	aggtcatcct	gctccgtgcc	660
ctgccttcc	tggcctgcgc	cttctactg	accaccgcgc	tgtatggggc	cagcggacac	720
ttcgccccag	gcaccactgt	gccccctggc	ctgccacctg	gtggcaatgg	ctcagccaca	780
cctgacaatg	gcaccacccc	tggggccgag	ggctggcggc	agttgctggg	cctactcccc	840
gagcacatgg	cggagaagct	gtgtgaggcc	tgggcctttg	ggcagagcca	ccagacgggc	900
gtcgtggcgc	tgggcctact	cacctgcctg	ctggcaatgc	tgtgtgctgg	ccgcatcagg	960
ctccggagga	tcgatgcctt	ctgcacctgc	ctgtgggccc	tgtgtctggg	gctgcacctg	1020
gctgaacagc	acctgcaggc	cgcttcgcct	agctggctaa	acacgctcaa	gttcagcacc	1080
acatctttgt	gctgcctggg	tggcttcacg	gcggctgtgg	ccacaaggaa	ggcaacgggc	1140
ccacggaggt	tccggccccc	aaggctcagag	aagcagccat	gactgcgggg	ggaggacaca	1200
cggatgtcta	ggcccaggct	ttgccagggt	cgaagcgggc	ccctctctgt	cctgcctctt	1260
ttcacctgct	cacgcctccc	cacccccacc	ctacagcccc	aggtcctggc	ccagtccttc	1320
cactgcctcg	aagagtcagt	ctgccctgcc	ttttcctttc	gggcaccacc	agccatcccc	1380
gagtgcctcg	tagccactca	ccactgctgc	cacctctctg	gccaatggcc	ctttactagg	1440
cctggtgact	ggaatgtggg	cagcgcgccac	acaggctctg	gccccatggc	tcctactggc	1500
agctccaggc	acccccctct	caccacgcgc	tttgctggct	ctgacactgt	tgggtgaggg	1560
tcctggctct	gctgtcttcc	cttctggcct	ctgcacaggg	gtggtgacag	tggctacagg	1620
ctgggcccc	ggcgtgcctt	gaccgtgcag	cagagtggag	ctggggcagc	agagagcccc	1680
agcctcacc	ctgaggagca	cctgtggtct	gtcccccttg	tcctgcttat	ggctggaccg	1740
gccctgcagg	aggtggtgga	gccgtgaagg	aggccgagct	gcagctctgg	ctgctgcttg	1800
gcctcctgct	ccaagaccct	cccagatccc	cggaaatgga	gagtgcagtt	cttgggcccc	1860
gcctggcctt	cgccatgagt	ttggggagcg	agacccccacc	tgagacaggc	agtaggagcc	1920
tgtgtgacc	ttgggggaatc	tgagcttttc	caagggtaa	gggcccaggg	tatgcaggcc	1980
ttcagtga	tcaggtcggt	gtcatccttt	ccctccctga	cctgtcacga	gcctctgcag	2040
gtgcctgtc	accatggccc	agcgcctc	tgtcctccga	ctcaggtgag	ggggcagccc	2100
acagacctgc	tcctcagtag	cagggcctgg	ccaggcccc	gctgttctca	gcctcagttt	2160
gccatctatg	aaatgagggtg	gacccctctc	catagccctt	gggtgcccagc	tcagtgggtg	2220
tggggatcac	atgagggtgg	tcagtggagg	acactctgga	agtcgagggg	ctgccacgtg	2280
cagaggaagt	tcccggcctg	ggggccttat	ccagggtgcc	cagtcgagag	tggcccaggg	2340
ccgtccctca	ccgggcatgt	tccctctggc	tgcccactcc	ctcaggggcc	acatgtcctg	2400
ccactcgcca	ctctgagcac	gagttcacct	tccagatgtg	gccagggtgt	gccagctcct	2460
ctctcctgtg	cggttgaacc	ccgggggagg	caagagcaga	tcacaggtgc	atgagggtta	2520
cacccgtcac	ctgggtctgc	cgggatgggt	tgggggggca	ggtgccaggc	ctcactgctg	2580
tgaatctgcc	acgcctgggg	gtcctagagg	ctgccccacc	ccagtgattg	ggtagcagct	2640
cacatcccac	ccagcttcac	aagtgaggaa	cccaggtgca	tcgggagacc	ctcgggggct	2700
tctgtggcct	ctgtgcccga	tgacctgcgt	ggcttcagac	aaggccccag	cgttactggg	2760
ctcagcttgt	tgttctgtgt	ggagcgtgag	gtgagaaaac	ccctctgaaa	agatgtgggtc	2820
ggggccacgc	ttcccactgg	ttctgcagtg	aggagtggg	gcgggtgagc	caaagcggcc	2880
ccccatggtg	tctacctgag	gggcaggga	ccgctgcct	gtgcactcac	gccaccccc	2940
agccacaaa	gagcccatct	gagagaagga	cgtggtggag	ccaggacggg	aaagcgtcct	3000
gtcggctggc	catgctgttg	cttgcgtctc	ttctcgagga	agtggtgaca	agtggtgaca	3060
gtgtgatggt	aatgtctgct	tttcttggcg	ttgggtagaa	gcaggacatc	tgtgtgtatg	3120
tgcgatttta	aattagatta	tttataataa	ccagagccag	ccctcgcgct	ggccaggatc	3180
ctcctgccga	gctgatgtcg	ctcctgccct	ctgccggggt	ccggaagcga	catctcagga	3240
ggtagctctc	agcagagtga	ggattcctgc	ctttcgtaga	gttttgtgtg	actttttaaa	3300
ttattcactg	gtcccttaaa	agtttacta	cgtggagaaa	attccagcac	caagtgttgt	3360
ggcaacagct	gagagagctg	aggcaacct	gtgtgtggc	ttgttgaccg	ggaatgtgtc	3420
acccctgcc	gggaactctt	ctcctcgcg	gggacttggg	atggccatca	gaccttctag	3480
ggtctggctg	gggtcatcct	aggtatgggt	gaccgtccct	gagacataag	cgaggtagat	3540

6069-74A.SEQ.txt

```

tcagccatcc tcaccctcag acttgaggtc cccaccagg ccaagccggc cccccgtacc 3600
ccttgccctgg gagcaaacgg ccaggacgca gcctccacgc cgcacctgcc acattcagcc 3660
ctgcccagga aggaacacat gacccttctg tctgtgactg ttgctgagtc tctgtctcat 3720
gtcgtagaat tgtggataat tgtctagtga cctctcatc actgtaacca tcgcgcctgg 3780
cctagatgtc gtgttttggg tgctgtgttt tcaataaatg cctctggggc cctgctttta 3840
ccaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa 3900
a 3901

```

<210> 92
 <211> 392
 <212> PRT
 <213> Homo sapiens

<400> 92
 Met Glu Gly Val Ser Ala Leu Leu Ala Arg Cys Pro Thr Ala Gly Leu
 1 5 10 15
 Ala Gly Gly Leu Gly Val Thr Ala Cys Ala Ala Ala Gly Val Leu Leu
 20 25 30
 Tyr Arg Ile Ala Arg Arg Met Lys Pro Thr His Thr Met Val Asn Cys
 35 40 45
 Trp Phe Cys Asn Gln Asp Thr Leu Val Pro Tyr Gly Asn Arg Asn Cys
 50 55 60
 Trp Asp Cys Pro His Cys Glu Gln Tyr Asn Gly Phe Gln Glu Asn Gly
 65 70 75 80
 Asp Tyr Asn Lys Pro Ile Pro Ala Gln Tyr Leu Glu His Leu Asn His
 85 90 95
 Val Val Ser Ser Ala Pro Ser Leu Arg Asp Pro Ser Gln Pro Gln Gln
 100 105 110
 Trp Val Ser Ser Gln Val Leu Leu Cys Lys Arg Cys Asn His His Gln
 115 120 125
 Thr Thr Lys Ile Lys Gln Leu Ala Ala Phe Ala Pro Arg Glu Glu Gly
 130 135 140
 Arg Tyr Asp Glu Glu Val Glu Val Tyr Arg His His Leu Glu Gln Met
 145 150 155 160
 Tyr Lys Leu Cys Arg Pro Cys Gln Ala Ala Val Glu Tyr Tyr Ile Lys
 165 170 175
 His Gln Asn Arg Gln Leu Arg Ala Leu Leu Leu Ser His Gln Phe Lys
 180 185 190
 Arg Arg Glu Ala Asp Gln Thr His Ala Gln Asn Phe Ser Ser Ala Val
 195 200 205
 Lys Ser Pro Val Gln Val Ile Leu Leu Arg Ala Leu Ala Phe Leu Ala
 210 215 220
 Cys Ala Phe Leu Leu Thr Thr Ala Leu Tyr Gly Ala Ser Gly His Phe
 225 230 235 240
 Ala Pro Gly Thr Thr Val Pro Leu Ala Leu Pro Pro Gly Gly Asn Gly
 245 250 255
 Ser Ala Thr Pro Asp Asn Gly Thr Thr Pro Gly Ala Glu Gly Trp Arg

260

265

270

Gln Leu Leu Gly Leu Leu Pro Glu His Met Ala Glu Lys Leu Cys Glu
 275 280 285
 Ala Trp Ala Phe Gly Gln Ser His Gln Thr Gly Val Val Ala Leu Gly
 290 295 300
 Leu Leu Thr Cys Leu Leu Ala Met Leu Leu Ala Gly Arg Ile Arg Leu
 305 310 315 320
 Arg Arg Ile Asp Ala Phe Cys Thr Cys Leu Trp Ala Leu Leu Leu Gly
 325 330 335
 Leu His Leu Ala Glu Gln His Leu Gln Ala Ala Ser Pro Ser Trp Leu
 340 345 350
 Asn Thr Leu Lys Phe Ser Thr Thr Ser Leu Cys Cys Leu Val Gly Phe
 355 360 365
 Thr Ala Ala Val Ala Thr Arg Lys Ala Thr Gly Pro Arg Arg Phe Arg
 370 375 380
 Pro Arg Arg Ser Glu Lys Gln Pro
 385 390

<210> 93

<211> 2203

<212> DNA

<213> Homo sapiens

<400> 93

```

cagcgggtggg aggcggcgac cagccgggttg aggccccagg cttggcctca ccacaatgtg 60
gcacgaggct cggaagcatg agcggaaagct tcgaggcatg atgggtcgact acaagaagag 120
ggcggagcgg agacgggagt attatgaaaa gatcaagaag gacccagccc agttcctgca 180
ggtacatggc cgagcttgca aggtgcacct ggattctgca gtcgccctgg ccgctgagag 240
ccctgttaat atgatgccct ggcaggggga caccaacaac atgattgacc gattcgatgt 300
ccgtgcccac ctggaccaca tccccgacta cccccccct ctgctcacca ccatctcccc 360
agaacaggag tcggacgaac ggaagtgtaa ctacgagcgc tacagaggcc tgggtgcagaa 420
cgactttgcc ggcattctcag aggagcagtg cctgtaccag atctacattg atgagttgta 480
cggaggcctc cagagaccca gcgaagatga gaagaagaag ctggcagaga agaaggcttc 540
catcggttat acctacgagg acagcacggt ggccgaggta gagaaggcgg cagaaaagcc 600
agaggaggag gagtcagcgg ccgaggagga gagcaactcg gacgaagatg aggtcatccc 660
cgacatcgac gtggagggtg acgtggatga attgaaccag gagcagggtg cagatctcaa 720
caaacaggcc acgacttatg gcatggccga cggtgacttc gtcaggatgc tccggaaaaga 780
caaggaggag gcagaggcca tcaagcatgc caaggctctt gaggaggaga aggccatgta 840
ctcgggacgc cgctctcgac gccagcggag agagtctcgg gagaagcggc tgaggggtcg 900
caagatcagc ccacccagct atgcccggcg agacagcccc acctatgacc cctataagcg 960
gtcacccctc gagtccagct cagagtcccg ctcccgtctc cgctccccga ccccgggccg 1020
cgaggagaag atcacgttca tcaccagttt tgggggcagc gatgaggagg cagccgcagc 1080
cgctgctgcc gcagcagcat caggagtcac cacagggaag cccccgcac ctccccagcc 1140
tggcggcccc gccccgggac gtaatgccag cgcccggcgc cgctcctcct cctcctcctc 1200
ctcctcttct gcctcgagga cctccagctc ccgtccagc tctcgctcca gctcccgtc 1260
tcgccgtggt gggggctact accgttccgg ccgccaacgc cgctcccggg cccgctcctg 1320
gtcccgtctc cgctcccgtc cccggcgcta ttcccgtctc cgtagccgtg gccggcggca 1380
ctcaggtggg ggctcccag acggacaccg gtactcccgc tcgcccggcc ggcgtggtgg 1440
ttacgggccc cggcgagaa gcaggagccg ctcccaactca ggggaccgct acaggcgggg 1500
cggccggggc ctcaggcacc acagcagtag ccgcagccgc agcagctggt ccctcagccc 1560
gtcccgcagt cgcagcctga ctcgcagccg cagccatagc cccagcccca gccagagccg 1620
cagccgcagc cgagccgca gccagagccc ctcgccatca cccgcaagag agaagctgac 1680
caggccggcc gcgtcccctg ctgtgggcga gaagctgaaa aagaccgaac ctgccgctgg 1740
taaagagaca ggagctgcca aaccaagct gacgcctcag gagaagctga aactgaggat 1800

```

6069-74A.SEQ.txt

```

gcagaaggcg ctgaacaggc agttcaaggc ggataagaag gcggcacaag aaaagatgat 1860
ccagcaggag catgagcggc aggagcggga agacgagctt cgagccatgg cccgcaagat 1920
ccgcatgaag gagcgggaac gccgagagaa ggagagagaa gagggggaac gccagtagag 1980
ccggcagagc cgctcaccct ccccccgcata cagtcgagaa tacagctctt ctcgaaggcg 2040
ctcaagggtcc cgatcccga gccccatta cgcacattag gcagaagagt ggggggtggg 2100
gaggacaagg ggggtgggtaa ggggctcaag ctgtgatgct gctggtttta tctctagtga 2160
aataaagtca aaagttattt aattcccgtc aaaaaaaaaa aaa 2203

```

<210> 94

<211> 674

<212> PRT

<213> Homo sapiens

<400> 94

```

Met Trp His Glu Ala Arg Lys His Glu Arg Lys Leu Arg Gly Met Met
  1          5          10          15
Val Asp Tyr Lys Lys Arg Ala Glu Arg Arg Glu Tyr Tyr Glu Lys
          20          25          30
Ile Lys Lys Asp Pro Ala Gln Phe Leu Gln Val His Gly Arg Ala Cys
          35          40          45
Lys Val His Leu Asp Ser Ala Val Ala Leu Ala Ala Glu Ser Pro Val
          50          55          60
Asn Met Met Pro Trp Gln Gly Asp Thr Asn Asn Met Ile Asp Arg Phe
          65          70          75          80
Asp Val Arg Ala His Leu Asp His Ile Pro Asp Tyr Thr Pro Pro Leu
          85          90          95
Leu Thr Thr Ile Ser Pro Glu Gln Glu Ser Asp Glu Arg Lys Cys Asn
          100          105          110
Tyr Glu Arg Tyr Arg Gly Leu Val Gln Asn Asp Phe Ala Gly Ile Ser
          115          120          125
Glu Glu Gln Cys Leu Tyr Gln Ile Tyr Ile Asp Glu Leu Tyr Gly Gly
          130          135          140
Leu Gln Arg Pro Ser Glu Asp Glu Lys Lys Lys Leu Ala Glu Lys Lys
          145          150          155          160
Ala Ser Ile Gly Tyr Thr Tyr Glu Asp Ser Thr Val Ala Glu Val Glu
          165          170          175
Lys Ala Ala Glu Lys Pro Glu Glu Glu Glu Ser Ala Ala Glu Glu Glu
          180          185          190
Ser Asn Ser Asp Glu Asp Glu Val Ile Pro Asp Ile Asp Val Glu Val
          195          200          205
Asp Val Asp Glu Leu Asn Gln Glu Gln Val Ala Asp Leu Asn Lys Gln
          210          215          220
Ala Thr Thr Tyr Gly Met Ala Asp Gly Asp Phe Val Arg Met Leu Arg
          225          230          235          240
Lys Asp Lys Glu Glu Ala Glu Ala Ile Lys His Ala Lys Ala Leu Glu
          245          250          255
Glu Glu Lys Ala Met Tyr Ser Gly Arg Arg Ser Arg Arg Gln Arg Arg

```

270

Page 86

6069-74A.SEQ.txt

595

600

605

Gln Glu Arg Glu Asp Glu Leu Arg Ala Met Ala Arg Lys Ile Arg Met
610 615 620

Lys Glu Arg Glu Arg Arg Glu Lys Glu Arg Glu Glu Trp Glu Arg Gln
625 630 635 640

Tyr Ser Arg Gln Ser Arg Ser Pro Ser Pro Arg Tyr Ser Arg Glu Tyr
645 650 655

Ser Ser Ser Arg Arg Arg Ser Arg Ser Arg Ser Arg Ser Pro His Tyr
660 665 670

Arg His

<210> 95

<211> 1014

<212> DNA

<213> Homo sapiens

<400> 95

```

gggcgccgcc gcctcctcct ccatggctgt ttacccggct gcattgtggg agtttgacct 60
ccgccgccgc caaccgccgc ctccagcttg gccgccgccg ccgccgccgc cgccgcgcac 120
gccatgggag ccgtgactga cgacgaagtt atacggaagc gtctcctcat tgatggagat 180
ggtgctggag atgatcggag aattaatctg ctagtgaaga gtttcattaa atggtgcaac 240
tctgggtccc aggaagaggg atatatgccag taccaacgta tgctgagcac gctgtctcaa 300
tgtgaatttt caatgggcaa aactttacta gtatatgata tgaatctcag agaaatggaa 360
aattatgaaa aaatttaciaa ggaaatagaa tgtagcatag ctggagcaca tgaaaaaatt 420
gctgagtgcg aaaagcaaat tcttcaagca aaacgaatac gaaaaaatcg ccaagaatat 480
gatgctttgg caaaagtgat tcagcaccat ccagacaggc atgagacatt aaaggaacta 540
gaggctctgg gaaaagaatt agagcatctt tcacacatta aagaaagtgt tgaagataag 600
ctggaattga gacggaaaca gtttcatgtt cttcttagta ccatccatga acttcagcaa 660
acattggaaa atgatgaaaa actctcagag gtagaagaag ctgaggaagc aagcatggaa 720
acagatccta agccatagac aggctaattg cccaccactc ccaggaatat tgaaatagct 780
acatgaccat aatgtgttta aaatgtggta tgctcttgag atatttaaag ttttggcagt 840
aaaatactct gtttttaagt atgaatgtat ttcatccta tttcctctca caaaggaaaa 900
tgacttcagt atagatttgt ttttattaaa atgcattttt tattcttaag tggtaggaag 960
caacatccaa aaatgcttaa taaaatgctt ttaagctgca aaaaaaaaaa aaaa 1014

```

<210> 96

<211> 204

<212> PRT

<213> Homo sapiens

<400> 96

Met Gly Ala Val Thr Asp Asp Glu Val Ile Arg Lys Arg Leu Leu Ile
1 5 10 15

Asp Gly Asp Gly Ala Gly Asp Asp Arg Ile Asn Leu Leu Val Lys
20 25 30

Ser Phe Ile Lys Trp Cys Asn Ser Gly Ser Gln Glu Glu Gly Tyr Ser
35 40 45

Gln Tyr Gln Arg Met Leu Ser Thr Leu Ser Gln Cys Glu Phe Ser Met
50 55 60

Gly Lys Thr Leu Leu Val Tyr Asp Met Asn Leu Arg Glu Met Glu Asn
65 70 75 80

6069-74A.SEQ.txt

Tyr Glu Lys Ile Tyr Lys Glu Ile Glu Cys Ser Ile Ala Gly Ala His
 85 90 95
 Glu Lys Ile Ala Glu Cys Lys Lys Gln Ile Leu Gln Ala Lys Arg Ile
 100 105 110
 Arg Lys Asn Arg Gln Glu Tyr Asp Ala Leu Ala Lys Val Ile Gln His
 115 120 125
 His Pro Asp Arg His Glu Thr Leu Lys Glu Leu Glu Ala Leu Gly Lys
 130 135 140
 Glu Leu Glu His Leu Ser His Ile Lys Glu Ser Val Glu Asp Lys Leu
 145 150 155 160
 Glu Leu Arg Arg Lys Gln Phe His Val Leu Leu Ser Thr Ile His Glu
 165 170 175
 Leu Gln Gln Thr Leu Glu Asn Asp Glu Lys Leu Ser Glu Val Glu Glu
 180 185 190
 Ala Gln Glu Ala Ser Met Glu Thr Asp Pro Lys Pro
 195 200

<210> 97
 <211> 955
 <212> DNA
 <213> Homo sapiens

<400> 97
 aatcctcaac aaaatagtag caaaacaaat ccaatagtag atcacgaaga taatacagta 60
 tgatcaaatg ggatttattt caaggatgca tagatgattc aacattcacg atcaataaaa 120
 tttattctgt taatttttca taaggatgt ttttaaataa gaatggattt gtatattaga 180
 cataaaatga ctgttttagt tagcattctt agagctagct tcataatcca attaataaac 240
 ttgcaacttg agtgcagggtg ttttaatttt tataactgta tcctgtatgc tattcaaag 300
 agctaattgt agttattctt ataccattg gtattgggtt ccatagtata cataagtttt 360
 atttttggtt ttcctgtag accttcaaat atttactttc catagtctt ctggcataaa 420
 agctcccagt ttctatcttc aacagttcag gtcttgggat atctatcgtt ttatttggtt 480
 ttataacttt tatttagaag agttacatcc tttttagctt atttaatgat aaaaagttca 540
 cttttccac ttttgtagt gaagaattg ctgcccctaa catggatcta tcttggtttt 600
 acagagagaa gagaagagga agatattgaa gagaagaaat cgattaagaa aaaaattaaa 660
 gaacttaagt ttttagattc taaaattgcc cagaaccttt gtaagtatca tattccaata 720
 ccattcaagg acagtggaaa tatttcttta aatgatttca ttttcttta gaccgattat 780
 tcattatttg ctattttcat tttgttatta tatgcatgat aaattcacag ataactctcc 840
 tttaggtaaa ttatgggatt aaatgcttca aaagataagt gcatattaga aaatacaaat 900
 aagaagagggt tttaaaatga aattctacct ttcataactg aaaaaaaaaa aaaaaa 955

<210> 98
 <211> 97
 <212> PRT
 <213> Homo sapiens

<400> 98
 Met Ile Lys Ser Ser Leu Phe Pro Leu Leu Tyr Leu Asn Glu Leu Leu
 1 5 10 15
 Pro Leu Thr Trp Ile Tyr Leu Gly Phe Thr Glu Arg Arg Glu Glu Glu
 20 25 30
 Asp Ile Glu Glu Lys Lys Ser Ile Lys Lys Lys Ile Lys Glu Leu Lys
 35 40 45

6069-74A.SEQ.txt

Phe Leu Asp Ser Lys Ile Ala Gln Asn Leu Cys Lys Tyr His Ile Pro
 50 55 60

Ile Pro Phe Lys Asp Ser Gly Asn Ile Ser Leu Asn Asp Phe Ile Phe
 65 70 75 80

Phe Lys Thr Asp Tyr Ser Leu Phe Ala Ile Phe Ile Leu Leu Leu Tyr
 85 90 95

Ala

<210> 99
 <211> 1375
 <212> DNA
 <213> Homo sapiens

<400> 99
 gtcttctttt agggagcagg agtgcattctg gtaattgagg gtggatgttg tgtgtgctgg 60
 ggaggggtcc ttctgttttg tgctaccctt gtctactctg cccctggatg gtgcgggggtg 120
 ctttctccac cccacacttc cctgctcagc tcctcgtgct gccctgcatg cccaggcttg 180
 tgagccaagc tgcttttttg ggcagggagt agcagcagggt gggaggggtt acccatcagc 240
 ccttgcaagt cccccactca ggctcttgga aggtccagggt atgggctctg atgagagggt 300
 aaaagatgct cagggaaaca caggcctcag ctgcctagag gacctcccc ctgccttgca 360
 gtgggctcgg gtagagcagt atcaggagct aggggtgtct gctgcccaca ctctgtcttt 420
 ttgggataatc taactgctaa ggagggagt gacatcccc ttctggctca tgtgtctgac 480
 accaacaaca tggctctctg cctctctctt ttgactctcc ctttgtcctc cccatagagc 540
 tgggggtggg tggatcccta tacctggggc aggcagcccc aaagtggggg agggggatgg 600
 cagagactgt aaaggcgcca ctggactctg gcaaggcctt tattacctt actccccctc 660
 ctctcccatc accagcctca aggcctgagg ggtgcagggt ctctggcag ctactgggtg 720
 aggtttcctg gcacagactc acccttcttt ctggcaccac ctctttccct tttgaagaga 780
 cagcaacagc cgtagcaaaa gcagctgctg ctctgtctat gaggggtgat atatttttta 840
 cccaaagctc tgggaattgta catattttt ttaaaactca aagagggaaa gagccttgta 900
 tcatatgtga acattgtatc ataggtaatg ttgtacagac ccttttatac agtgatctgt 960
 cttgttctct cagcaaaaat cctctatgga cataggagggt gctgtgtccc atgccctctt 1020
 gccctgacag tgtcccatgg gcccccttct gctccctgcc cctccctgc tactgctgat 1080
 gcactctcct ctccctgcag cccctggctt cccagccttc ctctgaccc cttccaacag 1140
 ccttggaact ccagctgcca ccaccctctg ggtcggacac tgggacccac tggcccagtc 1200
 ttggctgctg cttaccctta gccttgatgc ctgccagggt acccccagcc cctccccgtt 1260
 gccctgcagc tttaacagag tgaaccatgt gtattgtaca ggcgcggttg tcattgcaga 1320
 aaccgctggg tggagaagaa gccgataaag tctatgaatc aaaaaaaaaa aaaaa 1375

<210> 100
 <211> 132
 <212> PRT
 <213> Homo sapiens

<400> 100
 Met Ala Glu Thr Val Lys Ala Pro Leu Asp Ser Gly Lys Ala Phe Ile
 1 5 10 15

Thr Phe Thr Pro Leu Pro Leu Pro Ser Pro Ala Ser Arg Pro Glu Gly
 20 25 30

Cys Arg Gly Ser Trp Gln Leu Leu Gly Glu Val Ser Trp His Arg Leu
 35 40 45

Thr Leu Leu Ser Gly Thr Thr Ser Phe Pro Phe Glu Glu Thr Ala Thr
 50 55 60

Ala Val Ala Lys Ala Ala Ala Ala Pro Ala Met Arg Val Tyr Ile Phe
 65 70 75 80

6069-74A.SEQ.txt

Phe Thr Gln Ser Ser Gly Ile Val His Leu Phe Phe Lys Thr Gln Arg
85 90 95

Gly Lys Glu Pro Cys Ile Ile Cys Glu His Cys Ile Ile Gly Asn Val
100 105 110

Val Gln Thr Leu Leu Tyr Ser Asp Leu Ser Cys Ser Cys Ser Lys Asn
115 120 125

Pro Leu Trp Thr
130

<210> 101
<211> 1213
<212> DNA
<213> Homo sapiens

<400> 101
ggcttcagggt tgaagtcctt ggttctttcca gttcctcacg ggtaggtag gggctcctgc 60
atcaccttca gaatccagtt ccaaccccca ctctccttag gccttggtgct ctgctctgcc 120
ctgccagggt gcccttggtcc atgtgagtag catgggcggg tggtaggggac ggcagtggtg 180
atgaaggggg tgcaccacag gcctcatgaa gcagttccca catgggcgtg tggctggggc 240
gtggccacca cagagcacat ggctgtgtct aggcgcaagc actttagcag tatctgttta 300
catgcgcaag gatcaagccg actacctgtg ctgtctactg ggacagcagt ctccgagcta 360
ctccgtacct ccctctgcca ggtcgtggag ttaggcccc gtccttactt gtcactggtt 420
cccactgtgc tcctaactgt gcagcacctg ggagctcttg cctggggctg gagggccctgg 480
taggagctgc agttggaggc cgttctgtgc ccagcagcgg tagcgggctc ccatgggccc 540
tgtgtctgca gggagccagg gctgcggcac atgtgtgtg aaactggcac ccacctggcg 600
tgctgtgccc gccacttgct tcctgcagca cctcctaccc tgctccgtgt cctccctctc 660
cccgcgcctg gctcaggagt gctggaaaag ctcacgcctc ggctggggag cctggcctct 720
tgatatacct cgagcttccc ctgtgtctcc cagccccagg accactggcc ccttggcctg 780
aggggctggg ggccccacga cctgcagcgt cgagtccggg agagagcccg gagcggcggtg 840
ccatctcggc tcggccttgc tgagagcctc cgccctggct ttctccctgt ctggattcag 900
tggctcacgt tgggtgtaca cagctagaat agatataatt agagagagag atatttttaa 960
gacaaagccc acaattagct gtcctttaac accgcagaac cccctcccag aagaagagcg 1020
atccctcgga cgggtccggg gggcaccctc agccgggctc tttgcagaag cagcaccgct 1080
gactgtgggc ccggccctca gatgtgtaca tatacggcta tttcctattt tactgttctt 1140
cagatttagt acttgtaaata aaacacacac attaaaggaga gattaaacat ttttgctaaa 1200
aaaaaaaaa aaa 1213

<210> 102
<211> 100
<212> PRT
<213> Homo sapiens

<400> 102
Met Lys Gly Val His His Arg Pro His Glu Ala Val Pro Thr Trp Ala
1 5 10 15
Cys Gly Trp Gly Val Ala Thr Thr Glu His Met Ala Val Ser Arg Arg
20 25 30
Lys His Phe Ser Ser Ile Cys Leu His Ala Gln Gly Ser Ser Arg Leu
35 40 45
Pro Val Leu Ser Thr Gly Thr Ala Val Ser Glu Leu Leu Arg Thr Ser
50 55 60
Leu Cys Gln Val Val Glu Leu Gly Pro Ser Pro Tyr Leu Ser Leu Val
65 70 75 80

6069-74A.SEQ.txt

Pro Thr Val Leu Leu Thr Val Gln His Leu Gly Ala Leu Ala Trp Gly
 85 90 95

Trp Arg Pro Trp
 100

<210> 103
 <211> 1036
 <212> DNA
 <213> Homo sapiens

<400> 103
 cctcaaatgc tttcttttctt cagatgcttt ttcgtgtaca tgatactagt agacactttt 60
 ctcttttatat ttactgatag tgaaaatcat acgcaataaa atattgatgt ttgaaggcag 120
 tgggtcaccaa ttggttaaaa aactatgaaa tgtaaactga attgttatat ctctatcctt 180
 tttgctttttc tctgtgtttt taatgtatgg aataaatctc ataaatagaa agaaaaataa 240
 tctagaaatt tttcaaagct agtactcttt ctctttataa atgtacacaa ttttaatctt 300
 tttacaaatt tatttaactg tacctactgt acttattgta gattcaatga cgcagttaag 360
 tcatcaccca aggatttatg aatttgagat tactgacctg ttttcttcat attgcattca 420
 catcaatatt tgtgaatttg ttgttcagct tttcattcaa acaaaaaata ttccctcaag 480
 aaagctccat ttttatcata aacatttcaa cataaccaac attagaacaa gtctgccatg 540
 ttaaaaataa tttaaagact tatctctgaa aacgggtatcc agaaacgcag gtgttcccag 600
 taatgtagct tcaaaaaataa aatgtgctat ttatatgaca tgaaattcat aacttttggg 660
 agggatatatt tatgacagca taaaaaataa attctgtgct ataaagaaga tccaacaaat 720
 taaccatata agcacagaaa atagagaaac acagttattg aatctactct tgtcattaac 780
 attttcaaaa aacaaaatgc atattgtaat atttggtaca tgacacttgc atgttgatat 840
 gcctatatac ttacaaagta ttcaatgtgt acttagcggc gcttaaaata tgtcatgtac 900
 aactcttata aacattttta caggggticcc atttgcactt catctttcag taaagtcttg 960
 tcagaaaaaaa attgtctgat aaatatggaa aaataaaaatt tgaattttag ttaaaaaaaa 1020
 aaaaaaaaaa aaaaaa 1036

<210> 104
 <211> 87
 <212> PRT
 <213> Homo sapiens

<400> 104
 Met Tyr Thr Ile Leu Ile Phe Leu Gln Ile Tyr Leu Thr Val Pro Thr
 1 5 10 15
 Val Leu Ile Val Asp Ser Met Thr Gln Leu Ser His His Pro Arg Ile
 20 25 30
 Tyr Glu Phe Glu Ile Thr Asp Leu Phe Ser Ser Tyr Cys Ile His Ile
 35 40 45
 Asn Ile Cys Glu Phe Val Val Gln Leu Phe Ile Gln Thr Lys Asn Ile
 50 55 60
 Pro Ser Arg Lys Leu His Phe Tyr His Lys His Phe Asn Ile Thr Asn
 65 70 75 80
 Ile Arg Thr Ser Leu Pro Cys
 85

<210> 105
 <211> 2349
 <212> DNA
 <213> Homo sapiens

<400> 105

6069-74A.SEQ.txt

```

tttttttttt ttttttgatt cttggtaaaa ttttatccaa aaaacaggat acatatatat 60
ttagagaagg aaatatgaaa tcaagagttt tggcagcccc tgcttttttt ttttttttag 120
ctccctaagg actgtagcag gataaaagga tccactggctc cgagtctctt tgagataaca 180
agtgatgaaa taaaaaagaa agcccatacc ctcaaataag gtcaggtaac cccattgccc 240
accctcccta caaggtaaaa aatgagtact tttagtaaca gttcagaatt catctttatc 300
tcctacctgc ctcatcggtg gaagtttaaa gtcattgatt tttttagaca ttgatacttg 360
tgtctataga caaataaact catattagac ggccaaagag gcctaccact gctgcaccag 420
cagtatacct cacgcactgc ctccaccactg cccctgcgcc cagatgctcc tgttgaaaag 480
tcacccgagg agacagctac ccagggtcccc agtctggaga gtctgacttt aaagctagag 540
cacgaggtgg tggccaggag ccgaccaacc ccacaagact atgagatgcg agtatcccc 600
tctgatacta cccctctggt ttcccggagt gttccaccag tcaaactgga ggatgaggat 660
gattcggact ctgagctgga cttgagcaag ctgtcaccat cttcttcttc ttctcatcc 720
tcatccagct ccagctccag cactgatgag agtgaggatg agaaggaaga gaagctaact 780
gaccagtccc gctcaaagct ctatgatgaa gagagctctcc tgtccctcac tatgtcccaa 840
gatggattcc caaatgaaga tggagaacaa atgacccctg agcttctgct actgcaggaa 900
agacaaagag cctctgagtg gcccaaggat cgtgtcctga taaaccgtat tgacctcgct 960
tgccaggctg tactctcagg gaagtggcct tctagccgta ggagccagga aatggtaaca 1020
ggaggaattt tggggccagg caaccacttg ctagacagtc cctcattgac tcctggagaa 1080
tatggtgact ctccagtccc cacaccacga agtagtagtg cagcttccat ggcagaggag 1140
gaagcatctg cagtcagcac agcggcagcc cagttcacca aacttcgccg aggcattggt 1200
gaaaaggagt ttacagttca aatcaaagat gaggaaggat tgaagttaac attccagaag 1260
cacaagttga tggcgaatgg agtaatggga gatggacatc cactgtttca taagaagaag 1320
gggaacagaa agaagctagt agagctggag gtggagtgc tggaaagagcc taatcacctt 1380
gatgtggacc tggagacccg gatccctgtc atcaataagg tggatggtac tttgctggtg 1440
ggtgaggatg cccctcgccg ggctgaactg gagatgtggt tacagggtca tccagagttt 1500
gctgttgatc cccgatttct agcgtatatg gaggatcgca gaaaacagaa gtggcaaaga 1560
tgtaaaaaaa ataataaggc agaattgaac tgtttgggaa tggaaaccagt acagacagct 1620
aactctagaa atgggaaaaa gggatcatcac actgaaacgg tgttcaaccg ggttttgcca 1680
gggcctattg caccagagag cagcaagaag cgggcccgtg ggatgcgacc agacctttct 1740
aagatgatgg cctcatgca ggggtggaagc actgggtctc tatctctgca taacacgttc 1800
caacacagca gtagtggcct acagtctgtg tcatctttgg gtcacagcag tgccacttct 1860
gcatctttgc cttttatgcc atttgtgatg ggtggtgcac catcatcccc tcatgtagac 1920
tccagcacca tgcttcatca ccaccaccac caccctccac cccaccatca ccaccatcac 1980
catccaggct tgagagcccc tggctacccc tcttcaccag tgactaccgc ctctggtact 2040
accctgcggt tgccaccact gcaacctgag gaggatgacg atgaggatga agaagatgat 2100
gatgacttat ctccagggcta tgatagctca gaaagggact tctcactcat tgatgatcct 2160
atgatgccag ctaactcaga ctccagtga gatgctgatg actgaagccc cagcatgggc 2220
ccattgctt gggcggctgc tgtattttca ttactctgg cccttggact atggaaaacgt 2280
ggggggggca ggggagatgt ggggaagtcc aggactccag gaggtgaaaa ggaaaaaaa 2340
aaaaaaaaa

```

<210> 106

<211> 539

<212> PRT

<213> Homo sapiens

<400> 106

Met Arg Val Ser Pro Ser Asp Thr Thr Pro Leu Val Ser Arg Ser Val
1 5 10 15

Pro Pro Val Lys Leu Glu Asp Glu Asp Asp Ser Asp Ser Glu Leu Asp
20 25 30

Leu Ser Lys Leu Ser Pro Ser Ser Ser Ser Ser Ser Ser Ser Ser
35 40 45

Ser Ser Ser Ser Thr Asp Glu Ser Glu Asp Glu Lys Glu Glu Lys Leu
50 55 60

Thr Asp Gln Ser Arg Ser Lys Leu Tyr Asp Glu Glu Ser Leu Leu Ser
65 70 75 80

Leu Thr Met Ser Gln Asp Gly Phe Pro Asn Glu Asp Gly Glu Gln Met
Page 92

95

Page 93

6069-74A.SEQ.txt

420

425

430

Phe Val Met Gly Gly Ala Pro Ser Ser Pro His Val Asp Ser Ser Thr
 435 440 445
 Met Leu His His His His His Pro His Pro His His His His His
 450 455 460
 His His Pro Gly Leu Arg Ala Pro Gly Tyr Pro Ser Ser Pro Val Thr
 465 470 475 480
 Thr Ala Ser Gly Thr Thr Leu Arg Leu Pro Pro Leu Gln Pro Glu Glu
 485 490 495
 Asp Asp Asp Glu Asp Glu Glu Asp Asp Asp Asp Leu Ser Gln Gly Tyr
 500 505 510
 Asp Ser Ser Glu Arg Asp Phe Ser Leu Ile Asp Asp Pro Met Met Pro
 515 520 525
 Ala Asn Ser Asp Ser Ser Glu Asp Ala Asp Asp
 530 535

<210> 107

<211> 3004

<212> DNA

<213> Homo sapiens

<400> 107

```

ggggcatgag catctcaggg ctgccagaat ggcttttgcgtagtgcatag caccagcgtg 60
tgtcatgtct tggctgcgtt tctgggggccc atggcccctc cttacgtggc aactattgtc 120
tttactagtc aaggaggctc agcctctggt gtgggtcaag gacccgctcc agctgacctc 180
taacccctg gggccacctg agccctggtc ttcccgtctc tcccatctcc catgggaatc 240
tccccatgca cctgctcccc cagcagcccc gggggacttt gattacctgg ggccctctgc 300
ttcttcgcag atgtcagccc tgcctcagga accaactgaa aatttggtc cattcctgaa 360
ggaattgga tcagctggag agctgcccct ggggccagag ccgttcttgg ctgcacatca 420
ggacttaaat gacaagcgga ctccagaaga aaggctccca gaggtgggtc cgcttctcaa 480
ccgggatcag aaccaggccc tagttcagct tcctcgctc aagtgggtc aaactacaga 540
tctagatcgg gctgcaggtc atcaggcaga tgaaatactt gtccactag acagtaagg 600
ttcaagacca accaaatttg ttgtttcgcc caagaacctg aagaaagatc tagctgaacg 660
ttggagcctt cctgagattg ttgggattcc acaccaatta tccaaacctc agcgtcagaa 720
acagactttg ccagatgatt atttgagtag ggacacactg tatcccggca gcctaccttc 780
agaactccgg gtgaacgcag atgagcctcc agggcctcct gagcaagttg gactttctca 840
attccatcta gagcccaaaa gtcaaaatcc agagaccctt gaagacatcc agtctctctc 900
actccaggaa gaagcccag cgcagcttct acagctccct caggaggtag aaccttcaac 960
ccagcaggag gccccagctc tgcctccaga gtcctctatg gagagtctag ctcaaactcc 1020
actgaatcat gaagtgcag ttcaacctcc aggtgaggat caagctcatt ataatttgcc 1080
caagtttaca gtcaaacctg cagatgtgga ggttaccatg acttcagagc ctaaaaatga 1140
gacagaatct acccaagccc agcaggaggc cccaattcag cctcccagg aggcggaacc 1200
ttcttctaca gccctgagga ctacagatcc tcctccagaa caccctgagg tgacacttcc 1260
accttcagac aagggtcagg ctcagcattc acacctgact gaagccacag ttcaacctct 1320
ggacctggag cttagcataa ctacagagcc tactacagag gttaaaccgt ctccaaccac 1380
ggaggaacc tcagctcagc ctccagaccc ggggcttgcc ataactccag aaccactac 1440
agagattgga cattccacag ccctggagaa gactagagct cctcatccag accagggtca 1500
gactctgcat cgaagcctga ctgaagctac aggtccacct acaaagttag aatcttcgca 1560
ggattcattg gtgcagtctg aaactgcacc agaggaacag aaggcctcca caagcaccaa 1620
catatgtgag ctctgcacct gcggagatga gactctgtca tgtgttggtc tcagcccaaa 1680
gcagaggctc cgccaagtgc ctgtgccaga gcccgacacc tacaatggca tcttcaccac 1740
cttaaatttc caaggaaact atatttcata ccttgatgga aatgtatgga aagcatacag 1800
ttggaccgag aaactaatct tcagtgaaaa ttatttgact gaattaccta aggattcatt 1860
tgaaggcctg ctatacctcc agtattttaga tttatcctgc aataaaatac gatatttga 1920
aagacaaaca tttgaatcac taccattttt gcagtatata aatctgggct gcaatttaat 1980

```

6069-74A.SEQ.txt

```

tacaaaactg agccttggaa catttcaggc ctggcacgga atgcagtttt tacacaactt 2040
aatttctcaat cgcaatcctc tgactactgt cgaagatcca tatctctttg aactgccggc 2100
attaaaaatat ctagacatgg gaacaacaca catcacactt acaacactta agaacattct 2160
cacgatgact gttgaactgg aaaaactgat cttacctagc catatggcct gctgcctctg 2220
ccaattttaa aatagcattg aggctgtctg caagacagtc aagctgcatt gcaacactgc 2280
atgtctgact aacagcatac attgtcctga agaagcatct gtagggaatc cagaaggagc 2340
gttcatgaag atgttacaag cccggaagca gcacatgagc actcagctga ctattgagtc 2400
ggaggcgccc tcagacagca gtggcatcaa cttgtcaggc tttgggggtg atcagcttga 2460
aattcagcta accgagcagc tacgggtccct catccccaac gaggatgtga gaaagtccat 2520
gtctcatgtt atccggacct tgaaaatgga atgttcagaa acacatgtgc aaggggagctg 2580
tgccaagctc atgtcgcgaa caggcctcct gatgaagctt ctcagcgagc agcaggaagc 2640
aaaggcattg aatgtagaat gggatacgga ccaacaaaaa acaaattata ttaatgagaa 2700
catggaacag aatgaacaga aagagcagaa gtcaagtggag ctcatgaaag aagttccagg 2760
agatgactat aagaacaaac tcattcttcgc aatatctgtg actgtaatac taataatttt 2820
gattataatt tttgtcttta tagaggtgaa ttcacataaa agggcatcag aaaaatacaa 2880
agacaacca tcaatatcag gagcctgagc atgagttaaa gcatgtggat ggcctggagc 2940
tatgttttta aaattgttat taaatatgtg ttttttactt aaaaaaaaaa aaaaaaaaaa 3000
aaaaa

```

<210> 108
 <211> 959
 <212> PRT
 <213> Homo sapiens

<400> 108
 Met Ala Phe Ala Glu Cys Ile Ala Pro Ala Cys Val Met Ser Trp Leu
 1 5 10 15
 Arg Phe Trp Gly Pro Trp Pro Leu Leu Thr Trp Gln Leu Leu Ser Leu
 20 25 30
 Leu Val Lys Glu Ala Gln Pro Leu Val Trp Val Lys Asp Pro Leu Gln
 35 40 45
 Leu Thr Ser Asn Pro Leu Gly Pro Pro Glu Pro Trp Ser Ser Arg Ser
 50 55 60
 Ser His Leu Pro Trp Glu Ser Pro His Ala Pro Ala Pro Pro Ala Ala
 65 70 75 80
 Pro Gly Asp Phe Asp Tyr Leu Gly Pro Ser Ala Ser Ser Gln Met Ser
 85 90 95
 Ala Leu Pro Gln Glu Pro Thr Glu Asn Leu Ala Pro Phe Leu Lys Glu
 100 105 110
 Leu Asp Ser Ala Gly Glu Leu Pro Leu Gly Pro Glu Pro Phe Leu Ala
 115 120 125
 Ala His Gln Asp Leu Asn Asp Lys Arg Thr Pro Glu Glu Arg Leu Pro
 130 135 140
 Glu Val Val Pro Leu Leu Asn Arg Asp Gln Asn Gln Ala Leu Val Gln
 145 150 155 160
 Leu Pro Arg Leu Lys Trp Val Gln Thr Thr Asp Leu Asp Arg Ala Ala
 165 170 175
 Gly His Gln Ala Asp Glu Ile Leu Val Pro Leu Asp Ser Lys Val Ser
 180 185 190
 Arg Pro Thr Lys Phe Val Val Ser Pro Lys Asn Leu Lys Lys Asp Leu
 195 200 205

6069-74A.SEQ.txt

Ala Glu Arg Trp Ser Leu Pro Glu Ile Val Gly Ile Pro His Gln Leu
 210 215 220
 Ser Lys Pro Gln Arg Gln Lys Gln Thr Leu Pro Asp Asp Tyr Leu Ser
 225 230 235 240
 Met Asp Thr Leu Tyr Pro Gly Ser Leu Pro Pro Glu Leu Arg Val Asn
 245 250 255
 Ala Asp Glu Pro Pro Gly Pro Pro Glu Gln Val Gly Leu Ser Gln Phe
 260 265 270
 His Leu Glu Pro Lys Ser Gln Asn Pro Glu Thr Leu Glu Asp Ile Gln
 275 280 285
 Ser Ser Ser Leu Gln Glu Glu Ala Pro Ala Gln Leu Leu Gln Leu Pro
 290 295 300
 Gln Glu Val Glu Pro Ser Thr Gln Gln Glu Ala Pro Ala Leu Pro Pro
 305 310 315 320
 Glu Ser Ser Met Glu Ser Leu Ala Gln Thr Pro Leu Asn His Glu Val
 325 330 335
 Thr Val Gln Pro Pro Gly Glu Asp Gln Ala His Tyr Asn Leu Pro Lys
 340 345 350
 Phe Thr Val Lys Pro Ala Asp Val Glu Val Thr Met Thr Ser Glu Pro
 355 360 365
 Lys Asn Glu Thr Glu Ser Thr Gln Ala Gln Gln Glu Ala Pro Ile Gln
 370 375 380
 Pro Pro Glu Glu Ala Glu Pro Ser Ser Thr Ala Leu Arg Thr Thr Asp
 385 390 395 400
 Pro Pro Pro Glu His Pro Glu Val Thr Leu Pro Pro Ser Asp Lys Gly
 405 410 415
 Gln Ala Gln His Ser His Leu Thr Glu Ala Thr Val Gln Pro Leu Asp
 420 425 430
 Leu Glu Leu Ser Ile Thr Thr Glu Pro Thr Thr Glu Val Lys Pro Ser
 435 440 445
 Pro Thr Thr Glu Glu Thr Ser Ala Gln Pro Pro Asp Pro Gly Leu Ala
 450 455 460
 Ile Thr Pro Glu Pro Thr Thr Glu Ile Gly His Ser Thr Ala Leu Glu
 465 470 475 480
 Lys Thr Arg Ala Pro His Pro Asp Gln Val Gln Thr Leu His Arg Ser
 485 490 495
 Leu Thr Glu Val Thr Gly Pro Pro Thr Lys Leu Glu Ser Ser Gln Asp
 500 505 510
 Ser Leu Val Gln Ser Glu Thr Ala Pro Glu Glu Gln Lys Ala Ser Thr
 515 520 525
 Ser Thr Asn Ile Cys Glu Leu Cys Thr Cys Gly Asp Glu Thr Leu Ser
 530 535 540

6069-74A.SEQ.txt

Cys Val Gly Leu Ser Pro Lys Gln Arg Leu Arg Gln Val Pro Val Pro
 545 550 555 560
 Glu Pro Asp Thr Tyr Asn Gly Ile Phe Thr Thr Leu Asn Phe Gln Gly
 565 570 575
 Asn Tyr Ile Ser Tyr Leu Asp Gly Asn Val Trp Lys Ala Tyr Ser Trp
 580 585 590
 Thr Glu Lys Leu Ile Leu Ser Glu Asn Tyr Leu Thr Glu Leu Pro Lys
 595 600 605
 Asp Ser Phe Glu Gly Leu Leu Tyr Leu Gln Tyr Leu Asp Leu Ser Cys
 610 615 620
 Asn Lys Ile Arg Tyr Ile Glu Arg Gln Thr Phe Glu Ser Leu Pro Phe
 625 630 635 640
 Leu Gln Tyr Ile Asn Leu Gly Cys Asn Leu Ile Thr Lys Leu Ser Leu
 645 650 655
 Gly Thr Phe Gln Ala Trp His Gly Met Gln Phe Leu His Asn Leu Ile
 660 665 670
 Leu Asn Arg Asn Pro Leu Thr Thr Val Glu Asp Pro Tyr Leu Phe Glu
 675 680 685
 Leu Pro Ala Leu Lys Tyr Leu Asp Met Gly Thr Thr His Ile Thr Leu
 690 695 700
 Thr Thr Leu Lys Asn Ile Leu Thr Met Thr Val Glu Leu Glu Lys Leu
 705 710 715 720
 Ile Leu Pro Ser His Met Ala Cys Cys Leu Cys Gln Phe Lys Asn Ser
 725 730 735
 Ile Glu Ala Val Cys Lys Thr Val Lys Leu His Cys Asn Thr Ala Cys
 740 745 750
 Leu Thr Asn Ser Ile His Cys Pro Glu Glu Ala Ser Val Gly Asn Pro
 755 760 765
 Glu Gly Ala Phe Met Lys Met Leu Gln Ala Arg Lys Gln His Met Ser
 770 775 780
 Thr Gln Leu Thr Ile Glu Ser Glu Ala Pro Ser Asp Ser Ser Gly Ile
 785 790 795 800
 Asn Leu Ser Gly Phe Gly Gly Asp Gln Leu Glu Ile Gln Leu Thr Glu
 805 810 815
 Gln Leu Arg Ser Leu Ile Pro Asn Glu Asp Val Arg Lys Phe Met Ser
 820 825 830
 His Val Ile Arg Thr Leu Lys Met Glu Cys Ser Glu Thr His Val Gln
 835 840 845
 Gly Ser Cys Ala Lys Leu Met Ser Arg Thr Gly Leu Leu Met Lys Leu
 850 855 860
 Leu Ser Glu Gln Gln Glu Ala Lys Ala Leu Asn Val Glu Trp Asp Thr
 865 870 875 880

6069-74A.SEQ.txt

Asp Gln Gln Lys Thr Asn Tyr Ile Asn Glu Asn Met Glu Gln Asn Glu
885 890 895

Gln Lys Glu Gln Lys Ser Ser Glu Leu Met Lys Glu Val Pro Gly Asp
900 905 910

Asp Tyr Lys Asn Lys Leu Ile Phe Ala Ile Ser Val Thr Val Ile Leu
915 920 925

Ile Ile Leu Ile Ile Ile Phe Cys Leu Ile Glu Val Asn Ser His Lys
930 935 940

Arg Ala Ser Glu Lys Tyr Lys Asp Asn Pro Ser Ile Ser Gly Ala
945 950 955

<210> 109
<211> 1331
<212> DNA
<213> Homo sapiens

<400> 109
gtttcttttct tttccatgat atcattatat ggacagttta ggggtggcttc atggattata 60
accatttgga tatttggttc actaacaatt ttcttactgg ccagagtctt tgggtggagaa 120
gttgcataatg gccaaagtcct tggagttata ggatattcat tacttcctct cattgtaata 180
gcccctgtac ttttggtggt tggatcattt gaagtgggtg ctacacttat aaaactgttt 240
gggtgtgtttt gggctgccta cagtgtctgct tcattgttag tgggtgaaga attcaagacc 300
aaaaagcctc ttctgattta tccaatcttt ttattataca tttatttttt gtcgttatat 360
actggtgtgt gatccaagtt atacatgaat agaaaaagat ggtgttaaatt ttgtgtgtag 420
gctgggaatt cttgctgaag gaattggaga aaacctgttg ctgcaaaatt ttacatgttc 480
cagatggaaa ggggaagtcta agcgcttttt aaaacaattt ttttttgat ttaattaagc 540
aattgcagtt atctgggatt tttgggtcag aattttaaat tctgtttgat tctccatatt 600
ccagtgaata aaatacaaaa gcattgtgtt tttaagattg tgtcgatatt cacctaaaaa 660
cttgtgccaa aagcacctgg atttggtaatt atatttcact taaagggtaa atttgacaat 720
atcttgataa tcaaaagtgc aatttttttc ttcaaaatgt tttctccagc atcacagatc 780
ctgcagatat atatttatat ttatacatat atatttatga aataattctt actcacaaaa 840
tatatttctg ataaacatta agatattaaa tctgatgcac aaacttttta atttggccat 900
taatcttttt tatttaaaaa tttaaatttg tttttaaaat tgtatatagt ttttaaaatc 960
tcacacatgc ttcgatactt cttgtttaag aattcttaat aactactaaa actgattttt 1020
aatagttgct gatatatatt tgggttggtt ggggtatactt ttcaaaacca tttttgaatg 1080
tccaaacatc tgattttaaag tttctgttta tctttctgac caaaggagca agaggataaa 1140
tggatatggc attcattaaa atctttacta tgtacaaaaa cagtaatat tacagcatca 1200
gtaaatatatt ttaagtggta ctcttaaatc ataaaagttg gggaaagaga cctttaaaat 1260
cttgtggtgt tgaacaatgt tatatgaagt agaaaaaata aaatacttcc cagttgaaaa 1320
aaaaaaaaaa a 1331

<210> 110
<211> 118
<212> PRT
<213> Homo sapiens

<400> 110
Met Ile Ser Leu Tyr Gly Gln Phe Arg Val Val Ser Trp Ile Ile Thr
1 5 10 15

Ile Trp Ile Phe Gly Ser Leu Thr Ile Phe Leu Leu Ala Arg Val Leu
20 25 30

Gly Gly Glu Val Ala Tyr Gly Gln Val Leu Gly Val Ile Gly Tyr Ser
35 40 45

Leu Leu Pro Leu Ile Val Ile Ala Pro Val Leu Leu Val Val Gly Ser
Page 98

6069-74A.SEQ.txt

50

55

60

Phe Glu Val Val Ser Thr Leu Ile Lys Leu Phe Gly Val Phe Trp Ala
65 70 75 80

Ala Tyr Ser Ala Ala Ser Leu Leu Val Gly Glu Glu Phe Lys Thr Lys
85 90 95

Lys Pro Leu Leu Ile Tyr Pro Ile Phe Leu Leu Tyr Ile Tyr Phe Leu
100 105 110

Ser Leu Tyr Thr Gly Val
115

<210> 111

<211> 2610

<212> DNA

<213> Homo sapiens

<400> 111

```

aattgaccat ctctgtgtaa ttctgattgt gtaccttgag acatacagag gatttctatt 60
tctctttttt gcctaagaat gtataattag tgtcatttta ttggggagaa attttatttt 120
tttgtcattt ctctgaagtt gacatttgat gagtgatttc tgaattctac cactcctctg 180
gggaaaaaaa tctcaatgga agattgtaca gttaaagtag ttgtttttcc ctcttgaggt 240
atgctatttt taaggtcatt aatttaaaat agaaaatattt ctttaaacca ttgggggtaaa 300
attttttaaa atatgggtgct ttgatataat tttagaaaaa gtgcctgaat cctaaaacta 360
actgtctata aagttaagtc cgtataacaa atgattatat atataacaaa gtaaaagtaa 420
atagtgtaga atattaaagt tctcttccag ggcaatgggt attgtggggg attaaacaga 480
agcccccttg ctatgatcaa ctgcaaagga aagaaaactaa atatggttca gtgataaaca 540
aaaaatagcaa agactgatca ggaaaatgag aaagagctat gcaaatacag atgatacaca 600
ggccagagaa ttttaagtgc taatagcttt actcctgcat attccatcag tagaatgagc 660
tttttctttt agtctaagtg acactttgaa ggtctttgca ttcattacgc ttttatatac 720
tgcttttctt ttctcttctt tttatttcat ccaacacact aagaaatgaa gaagtttatt 780
gatataattgc ccaataaaaat acaaatctgt tgcaacacaa tgcataatc ttattagcat 840
tcttgtagt tctaaaattc aattcatcca tagacactta ttcccagcct tcaaattgaa 900
agctctcttt atgcaagaga aaaagggtatt taaaagttag caaatttttag aatgaggaat 960
tggttatgct gaatttctgt tccaaaatca ctaggtaaaa tttccatata taataatgta 1020
tttaggaac aagccaaggt ttgtcattaa gacatagtaa cattaaacta atatttaaaa 1080
atagatttag ctatatitaa tcatgagaaa aggatttctg tggccaggac aaaaccacc 1140
ttgatcccaa agagacatta gcagtgcaca tgtcagagcc ttctcacatt cttggaataa 1200
agtaaaccac tccaaggaag gtgagggcac caaatggatc attcttcaaa atgaaaggca 1260
gtctcttact ttctcttgag acatttcttc cctatttggg gattttatga ctgctgttct 1320
ggagagccca catgttttgc ttccatgcag gccaaatcct tctcttgggt ttgggcaaga 1380
gaagttaatc cacctaacag cattttgatt agacaagaat atcatctgat cttatccagg 1440
gacaagaaag tggcatgacc aaaggttctc cttatgtctc tttctttaaa tgatttccta 1500
attttcagaa gggctcctgga tagactagtt tctgataagg agattttgct gtggtgtctg 1560
ttcttccagg ttaaaggcac acaaagcctt ctgtggtcca cttgtgcttg tcttctgaat 1620
tcactgaaac atggcagaat aagggttaagg gaaaaatgaat ttgacttta catagttaaa 1680
tgagtaggag ttacagcaaa aaaaaaaaaa aagacctaaa acttttattt aatagtattc 1740
ttcacctcag gaaattcaga ctttagttg tttaggtcag aaaaatgtgga tataatcctgt 1800
aacactgtct tcacctcact caagttaaat gtaacagcaa atactttcag ctttactttc 1860
aaaaggcttc cagaactttc cacatttcat cactttcact tctacccttc tgggtcaaat 1920
taccaagatt tttagtagtt tactgttccc tggtttctct gatttgatcc ttgctaccat 1980
tctgtttagt cctcaaagaa aaaaaaatcaa catttttaaa cgtttcaatt ctacttaatg 2040
gttctcatct cagaagaaaa aacaacgaaa tatcttatgt taatctaaaa aaccttcagt 2100
gacctacttg atctcatttt ctaccatttt cctcctcttt ttctgaaata catcaacaca 2160
gagcactttt cctctccttt aatgcacaaa gatggcagga cttttgaatg ttacatttat 2220
ttatcttctt cttagtgcc ttctcttata caccatgtg acttgttcct cccttccttc 2280
tagtctttgt ttatatatat attattatca cagagggcta ggaaagaaaa caccactgac 2340
tgcgccccac actcatccac ctgccctgta ccacttactt tgttttgttt ttctctgtag 2400
aattcatgac tttttgaaat ataatttttt taatgtgtac atactttatg ctttctctca 2460
ttcatatgta aagtctggaa gacacagact ggtttttttg ttcactgttg atgcttcagt 2520

```

6069-74A.SEQ.txt

ccctaaaata tgcatagcac gaattgccac tttttaaatt aataaatctg gaacattgtt 2580
 aaaattcaaa aaaaaaaaaa aaaaaaaaaa 2610

<210> 112
 <211> 116
 <212> PRT
 <213> Homo sapiens

<400> 112
 Met Ala Gly Leu Leu Asn Val Thr Phe Ile Tyr Leu Leu Leu Glu Cys
 1 5 10 15
 Leu Ser Leu Tyr Thr His Val Thr Cys Ser Ser Leu Pro Ser Ser Leu
 20 25 30
 Cys Leu Tyr Ile Tyr Tyr Tyr His Arg Gly Leu Gly Lys Lys Thr Pro
 35 40 45
 Thr Ala Ala Pro His Thr His Pro Pro Ala Leu Tyr His Leu Leu Cys
 50 55 60
 Phe Val Phe Leu Cys Arg Ile His Asp Phe Leu Lys Tyr Asn Phe Phe
 65 70 75 80
 Asn Val Tyr Ile Leu Tyr Ala Phe Ser His Ser Tyr Val Lys Ser Gly
 85 90 95
 Arg His Arg Leu Val Phe Leu Phe Thr Val Asp Ala Ser Val Pro Lys
 100 105 110
 Ile Cys Ile Ala
 115

<210> 113
 <211> 2759
 <212> DNA
 <213> Homo sapiens

<400> 113
 tttttttttt tttgaaagac acacgttatt ttattaatat agccatctct cccactgcc 60
 ccagtgggtga aggtgtttgc attgcaacat ggagggggcac caaatgtctct gcggggcccta 120
 gcccgctgcc acaggctagg cctgcctgca gccaaagaagg ctgctcaaac tctagatgcc 180
 atttggaggc atgaggacct gagcccagag gtggcagtggt cctaccagg gaagtcaaca 240
 gatcgtgctc caggtcccag ctctgggctg ggccaggact aaatcctggc tcccctttct 300
 tggactaag gggattagtg cttggttgct tgtagggggt cagagtaggg aggggtccag 360
 gaaggggtcc agagtgggct cacagggggac ctccctccct ggctcttggt agtccagggtc 420
 gtcgagggcg caaagctgca cgccatcctg ggcaagctgg gccgcagcg tgggcgcggt 480
 gaggacgcgc agctcatgca gccgctccca agagcaagag aaagcgtcgg ggccttcacc 540
 gcagccgccg gtgggaggca cactggggta gccgggggtgc gccatcagct cggctgtcag 600
 ggtgtggccc gctaggggtac cttccaggac ccgcgccagg gcccgggaca cgcggtgagc 660
 ggacatgtgc cggccgcaag tgctcaggcc cacgaaggcg tctgtccacc gcaggccgtg 720
 gcggggagaag ggcccacggc ggcccgggcg tcgcgctcca cggcgaggc gaaggcacgc 780
 gcgggggcct ccagccaagt gcagccaccc acaccgcgt ccagcggcag tcgcgtaaa 840
 cgcaccccat aggcctgcag cgctcggcg acacctggc acacgcctgg gagcacgtgc 900
 acgtgctggt gccgctccgc gtgcgtgggg gccctgccca gcagctcccg gaagcagctt 960
 agttgggcct cgagctctc ccgcacctag agggcgagcg agagacacct tgagcgaccg 1020
 ggagtagctg ccgaggatac cttcctcgtg cttccgtgtg atggctccag tgtttgaatg 1080
 cggaagtcac ccaccgccag ctctaaccgg cctcacagta cctccgggc ggagctctgg 1140
 ggtctctcgc gagcatctc ctgtagctgc ggctccgcac ctgaggcaa tccacgtctc 1200
 cggccgcac cgctcccg gcctcccg aatcccatct tgccaaggaa gaagccttcc gggccgagca 1260
 gcgatgaggc gccacggcgg gccggaccca cggggcgggc ctcgacagg ttggcgtgga 1320
 ggcccgtggg gatgctgtgc ctgcgggcca gctccgccc gctctccgtg gccgcaccgt 1380

6069-74A.SEQ.txt

```

tgaccagcag ggacacgctg gtcacggccc cggccagaaa ggcctccacg ataccctcat 1440
cgcgctgcgg gcagtaacca aagtcgtccg cggtgaccac caggcgcccg cgggagccgg 1500
cagatccggg tcttggtggt aagagtgcag tggtcactcg aatcaaaaca gaggaggggg 1560
aggaagccgg cggccagaaa cggcagtggc agcagcgtcc ggagcagccg cagccttctg 1620
gaagctccag gcggtctttc tgccgagcct cgggtcccggc ccccatcctc cccgccccat 1680
cggttgttgt ctgggcggat ttaaacagtc aagtaaaatc aagctgggta atcatggcag 1740
aagggtggatt tgatcccctg gaatgtgttt gctctcatga acatgcaatg agaagactga 1800
tcaatctgtt acggcagtc cagtcctact gcacagacac agagtgtctt caggaattac 1860
cgggaccctc tggtgataat ggcacagtg ttacaatgat cttggtagcc tggatgggta 1920
ttgcattgat cttgttctta ctgagacctc ctaatctaag aggatccagc ctacctggaa 1980
agccaaccag tcctcataat ggacaagatc caccagctcc tcctgtggac taactttgtg 2040
atatgggaag tgaaaatagt taacaccttg cagcacaaa cgaacgaaga tgaccagagt 2100
actcttaacc ccattagaac tgtttttcct tttgtatctg caatatggga tggatttgtt 2160
ttcatggagt tctagaaatt tcacttgcaa gtttattttt gcttcctgtg ttactgccat 2220
tcctattttac agtatatttg agtgaatgat tatattttta aaaagttaca tggggctttt 2280
ttggttgctc taaacttaca aacattccac tcattctgtt tgtaactgtg attataattt 2340
ttgtgataat ttctggcctg attgaaggaa atttgagagg tctgcattta tatattttaa 2400
atagatttga taggttttta aattgctttt ttccataagg tatttataaa gttatttggg 2460
gttggtctggg attgtgtgaa agaaaattag aaccacgctg tatttacatt taccttggta 2520
gtttatttgt ggatggcagt tttctgtagt ttgggggact gtggtagctc ttggattgtt 2580
ttgcaaatta cagctgaaat ctgtgtcatg gattaaactg gcttatgtgg ctagaatagg 2640
aagagaaaaa aaatgaaatg gttgtttact aattttatac tcccattaaa aatctctaata 2700
gttaagaaaa ccttaataaa acatgattga tcaatatgaa aaaaaaaaaa aaaaaaaaaa 2759

```

<210> 114
 <211> 99
 <212> PRT
 <213> Homo sapiens

<400> 114
 Met Ala Glu Gly Gly Phe Asp Pro Cys Glu Cys Val Cys Ser His Glu
 1 5 10 15
 His Ala Met Arg Arg Leu Ile Asn Leu Leu Arg Gln Ser Gln Ser Tyr
 20 25 30
 Cys Thr Asp Thr Glu Cys Leu Gln Glu Leu Pro Gly Pro Ser Gly Asp
 35 40 45
 Asn Gly Ile Ser Val Thr Met Ile Leu Val Ala Trp Met Val Ile Ala
 50 55 60
 Leu Ile Leu Phe Leu Leu Arg Pro Pro Asn Leu Arg Gly Ser Ser Leu
 65 70 75 80
 Pro Gly Lys Pro Thr Ser Pro His Asn Gly Gln Asp Pro Pro Ala Pro
 85 90 95
 Pro Val Asp

<210> 115
 <211> 1404
 <212> DNA
 <213> Homo sapiens

<400> 115
 aatcgggacg ggacgaatta ttggttgggg gaaaccacg aggggacgcg gccgaggagg 60
 gtcgctgtcc acccgggggc gtgggagtg ggtaccagat tcagcccatt tggccccgac 120
 gcctctgttc tcggaatccg ggtgctgcgg attgaggtcc cggttcctaa cgggtgggatc 180
 ggtgtcctcg ggatgagatt tggcgtttcc tcggggcctt ggtgggatcg gtgtcctcag 240
 gatgagattt aggggtttcct cggggccttc gggatcttca cctaatatcc ggtattattt 300

6069-74A.SEQ.txt

```

tatgagagga gtggtcttgg ctgtcagaac tggatccctg gggatgatatt tgggaattag 360
tggagtgatc tctgaagacc tagggctatg atctggagct gctgtggctg aaatttgggg 420
cctctgaagt ggcattggaga ttgagggtcca gagagcctga gatcttgagg gctgacattt 480
ggagagatgg ggtcgaggggt tgtcttttggg ccttgactgc tttgggcctt tctcactctc 540
attcccggga tgcctttgcca gaatctctgc tggattggcc gtaaccctgt ccccgagcgg 600
gctcacaggg tctgaaggcc acgcatgagg caaaggtaaa gttctgagcc acccggtgcc 660
tccttcccag gactgcaaga tggaggaagg cgggaaccta ggaggcctga ttaagatggt 720
ccatctactg gtcttgtcag gtgcctgggg catgcaaata tgggtgacct tcgtctcagg 780
tagggaccct cagcttggat gtcattgggt cctgggggtg ggatggaaat aagaggggaa 840
ccgggaagtg ccctaaccac cctgtggtcc ccataccctg caggcttcct gcttttccga 900
agccttcccc gacatacctt cggactagtg cagagcaaac tcttccccct ctacttccac 960
atctccatgg gctgtgcctt catcaacctc tgcattttgg cttcacagca tgcttgggct 1020
cagctcacat tctgggaggc cagccagctt tacctgctgt tcctgagcct tacgctggcc 1080
actgtcaacg cccgctggct ggaaccccg caccagctg ccatgtgggc cctgcaaacc 1140
gtggagaagg agcgaggcct ggggtggggag gtaccaggca gccaccaggg tcccgatccc 1200
taccgccagc tgcgagagaa ggaccccaag tacagtgtc tccgccagaa tttcttccgc 1260
taccatgggc tgcctctctt ttgcaatctg ggctgcgtcc tgagcaatgg gctctgtctc 1320
gctggccttg ccctggaaat aaggagcctc tagcatgggc cctgcatgct aataaatgct 1380
tcttcagaaa aaaaaaaaaa aaaa 1404

```

<210> 116
 <211> 184
 <212> PRT
 <213> Homo sapiens

<400> 116
 Met Ser Trp Val Pro Gly Val Gly Met Glu Ile Arg Gly Glu Pro Gly
 1 5 10 15
 Ser Ala Leu Thr Pro Leu Trp Ser Pro Tyr Pro Ala Gly Phe Leu Leu
 20 25 30
 Phe Arg Ser Leu Pro Arg His Thr Phe Gly Leu Val Gln Ser Lys Leu
 35 40 45
 Phe Pro Phe Tyr Phe His Ile Ser Met Gly Cys Ala Phe Ile Asn Leu
 50 55 60
 Cys Ile Leu Ala Ser Gln His Ala Trp Ala Gln Leu Thr Phe Trp Glu
 65 70 75 80
 Ala Ser Gln Leu Tyr Leu Leu Phe Leu Ser Leu Thr Leu Ala Thr Val
 85 90 95
 Asn Ala Arg Trp Leu Glu Pro Arg Thr Thr Ala Ala Met Trp Ala Leu
 100 105 110
 Gln Thr Val Glu Lys Glu Arg Gly Leu Gly Gly Glu Val Pro Gly Ser
 115 120 125
 His Gln Gly Pro Asp Pro Tyr Arg Gln Leu Arg Glu Lys Asp Pro Lys
 130 135 140
 Tyr Ser Ala Leu Arg Gln Asn Phe Phe Arg Tyr His Gly Leu Ser Ser
 145 150 155 160
 Leu Cys Asn Leu Gly Cys Val Leu Ser Asn Gly Leu Cys Leu Ala Gly
 165 170 175
 Leu Ala Leu Glu Ile Arg Ser Leu
 180

6069-74A.SEQ.txt

<210> 117
 <211> 1801
 <212> DNA
 <213> Homo sapiens

<400> 117
 tgaagaaggt gtttactttt tttgaaatta ccttgagaca tttcaaactg tgcagaagat 60
 atatgcacaa aagcaaagt cttgcagttt gctatagcca cttatacatc atctggctct 120
 tgaatagctt taattcagct gttgaatctc acttgaattt gagcaaaacc ttcattctta 180
 tatgtatctg gacaaattac ttcaattgct tgacagtaat gaccaatcaa tttattttaa 240
 atagtatcat ttagtaggac agtgtttttc tctggtttga gcaacgaatt caaccagtcc 300
 tctgggttga tcatcatcat catcatcatt tgggttatcag ttcctgagtt atttttacca 360
 gggagtttta taccttttaga caactatttt gaattatctc aggaatgtca tataatctctg 420
 cctcttttaga gtcagtcact ggcactttgt ctgtttgggtg acatcatggt tccctgactg 480
 ttcttcatct ttgtagttat acattgatat ctgtgcattg aatatgtagg tatttataaa 540
 cagtctttgc aatctggctt tgtctgtgat tgtccttgta tagtaggtct gtccagaaat 600
 tgtaagcata ctgtcttttt tggcttttaa gcccgtgaac gctacagccc gtgtagtgcc 660
 aaatggtgcc ctaagcccag gttccctgca gtccactctg tgatttggtt gttgactgct 720
 gtgagcccca cccccattct ttgtttctaa ttacaccta gcaggctaac cctgctggca 780
 cctgcagtgc ttccaggggg aaaggaccat agtgtgcccc tgtgaagagt ctgagaatgg 840
 tgcggaaggt gaatgccac ctcccgtctt cttttccac tgtagaaact gattccagag 900
 aaatttctca agtgcggtgc tatgtgggct tgcgggagag gtgttatgat caaacagaac 960
 cattctcttt accctctgtt catggttttt cttggctctg tgggtccagtg agttgtcaca 1020
 gcttcaactcc caatttctgg gatattcagg gcaataatct tgccactggg tatttgctag 1080
 ttgaaattat gtggtagggg gagaagccag taagcttcac ttctccgttt ggctgatgtc 1140
 actctcgaat tctgtacttt catacggatt gtaataggga gggctctaaa ggaagcttca 1200
 gttttggatt ttttagagctt cttctaagta caattgttga atcaagaggt aaagatggta 1260
 tgttataact ggaaatacgc tgagattaaa aaggagataa attagcccca ttgggacagt 1320
 gctattggga atgtgaattg ataccacttt cctggagtct agtttagtat ttattttata 1380
 tgtaatgcct gaaaagatgt gtgtctcctt tgactcaata cttataggaa ttacacaaa 1440
 ggttataatc aaagattata gaactgttat actggaaaaa cacgaaatat tctaattatg 1500
 aattaattgg ggattgggta aataaactat gggttgatat gctctaaaaa taatgttaca 1560
 gaaaaaagtg tactgatatg gcaaaaatgta tgacttatag ttaaaaaagc aggttagatg 1620
 ttgatagata cagtatgata gaaaaagatc aggaagggtat atgctgacat ttaaactctgg 1680
 atatttatga gtgttttttt tatttcaatc tttgtacatg catgtatttt ctagaaattg 1740
 tattactatc ttigtataaa agtaaaattat ttttaaggga ctaaaaaaa aaaaaaaaaa 1800
 a 1801

<210> 118
 <211> 86
 <212> PRT
 <213> Homo sapiens

<400> 118
 Met Val Arg Lys Val Asn Ala His Leu Pro Leu Ser Phe Pro Thr Val
 1 5 10 15
 Glu Thr Asp Ser Arg Glu Ile Leu Gln Val Arg Cys Tyr Val Gly Leu
 20 25 30
 Arg Glu Arg Cys Tyr Asp Gln Thr Glu Pro Phe Ser Leu Pro Ser Val
 35 40 45
 His Gly Phe Ser Trp Leu Cys Gly Pro Val Ser Cys His Ser Phe Thr
 50 55 60
 Pro Asn Phe Trp Asp Ile Gln Gly Asn Asn Leu Ala Thr Gly Tyr Leu
 65 70 75 80
 Leu Val Glu Ile Met Trp
 85

<210> 119
 <211> 29
 <212> DNA
 <213> Artificial Sequence

<220>
 <223> oligonucleotide

<220>
 <221> misc_feature
 <222> (2)
 <223> biotinylated phosphoramidite residue

<400> 119
 ancgggagcc tcctgacccat ctcctcttc

29

<210> 120
 <211> 29
 <212> DNA
 <213> Artificial Sequence

<220>
 <223> oligonucleotide

<220>
 <221> misc_feature
 <222> (2)
 <223> biotinylated phosphoramidite residue

<400> 120
 cncacagaaa attcaataag accctcgct

29

<210> 121
 <211> 29
 <212> DNA
 <213> Artificial Sequence

<220>
 <223> oligonucleotide

<220>
 <221> misc_feature
 <222> (2)
 <223> biotinylated phosphoramidite residue

<400> 121
 cncagctctt cgtagggaag ttctgactt

29

<210> 122
 <211> 29
 <212> DNA
 <213> Artificial Sequence

<220>
 <223> oligonucleotide

<220>
 <221> misc_feature
 <222> (2)
 <223> biotinylated phosphoramidite residue

<400> 122
 antcctgcac accagccagt aacgccacc

29

<210> 123
 <211> 29
 <212> DNA
 <213> Artificial Sequence

<220>
 <223> oligonucleotide

<220>
 <221> misc_feature
 <222> (2)
 <223> biotinylated phosphoramidite residue

<400> 123
 gnggctggaa agatgtgtgg ggatcaaga

29

<210> 124
 <211> 29
 <212> DNA
 <213> Artificial Sequence

<220>
 <223> oligonucleotide

<220>
 <221> misc_feature
 <222> (2)
 <223> biotinylated phosphoramidite residue

<400> 124
 anatgggtct aagccacaca acagggtga

29

<210> 125
 <211> 29
 <212> DNA
 <213> Artificial Sequence

<220>
 <223> oligonucleotide

<220>
 <221> misc_feature
 <222> (2)
 <223> biotinylated phosphoramidite residue

<400> 125
 ancggcaggg aacttacagg gacagagct

29

<210> 126
 <211> 29
 <212> DNA
 <213> Artificial Sequence

<220>
 <223> oligonucleotide

<220>
 <221> misc_feature
 <222> (2)
 <223> biotinylated phosphoramidite residue

<400> 126

gngtttttcgg tgtcgatggg gtagaggat 29

<210> 127
 <211> 29
 <212> DNA
 <213> Artificial Sequence

<220>
 <223> oligonucleotide

<220>
 <221> misc_feature
 <222> (2)
 <223> biotinylated phosphoramidite residue

<400> 127
 cnagaacaca tagggatgcg agagcaagc 29

<210> 128
 <211> 29
 <212> DNA
 <213> Artificial Sequence

<220>
 <223> oligonucleotide

<220>
 <221> misc_feature
 <222> (2)
 <223> biotinylated phosphoramidite residue

<400> 128
 anactgaaaa ctgagtatgt gcgagtgt 29

<210> 129
 <211> 29
 <212> DNA
 <213> Artificial Sequence

<220>
 <223> oligonucleotide

<220>
 <221> misc_feature
 <222> (2)
 <223> biotinylated phosphoramidite residue

<400> 129
 gntatccatt tcctcttctt catctgagt 29

<210> 130
 <211> 29
 <212> DNA
 <213> Artificial Sequence

<220>
 <223> oligonucleotide

<220>
 <221> misc_feature
 <222> (2)
 <223> biotinylated phosphoramidite residue

<400> 130
tnccttgaggc aatggttgaa gtccggcg 29

<210> 131
<211> 29
<212> DNA
<213> Artificial Sequence

<220>
<223> oligonucleotide

<220>
<221> misc_feature
<222> (2)
<223> biotinylated phosphoramidite residue

<400> 131
tncctgctg tgccttctc tatccgaac 29

<210> 132
<211> 29
<212> DNA
<213> Artificial Sequence

<220>
<223> oligonucleotide

<220>
<221> misc_feature
<222> (2)
<223> biotinylated phosphoramidite residue

<400> 132
gngcatctca ctggatgtca tcatcatca 29

<210> 133
<211> 29
<212> DNA
<213> Artificial Sequence

<220>
<223> oligonucleotide

<220>
<221> misc_feature
<222> (2)
<223> biotinylated phosphoramidite residue

<400> 133
tngtccatgt gaagggcatg ggccagttg 29

<210> 134
<211> 29
<212> DNA
<213> Artificial Sequence

<220>
<223> oligonucleotide

<220>
<221> misc_feature
<222> (2)
<223> biotinylated phosphoramidite residue

<400> 134
 gngcactgta ttgagctgat tgctgaagc 29
 <210> 135
 <211> 29
 <212> DNA
 <213> Artificial Sequence
 <220>
 <223> oligonucleotide
 <220>
 <221> misc_feature
 <222> (2)
 <223> biotinylated phosphoramidite residue
 <400> 135
 cncagaagca gaagaatgac aggcaacac 29
 <210> 136
 <211> 29
 <212> DNA
 <213> Artificial Sequence
 <220>
 <223> oligonucleotide
 <220>
 <221> misc_feature
 <222> (2)
 <223> biotinylated phosphoramidite residue
 <400> 136
 anacattctg agtagttgca tgatttccc 29
 <210> 137
 <211> 29
 <212> DNA
 <213> Artificial Sequence
 <220>
 <223> oligonucleotide
 <220>
 <221> misc_feature
 <222> (2)
 <223> biotinylated phosphoramidite residue
 <400> 137
 gnccagaaag ttgaggacat gctgggcag 29
 <210> 138
 <211> 29
 <212> DNA
 <213> Artificial Sequence
 <220>
 <223> oligonucleotide
 <220>
 <221> misc_feature
 <222> (2)

<223> biotinylated phosphoramidite residue
 <400> 138
 angggaacaa gacaactgga gaaggggtca 29
 <210> 139
 <211> 29
 <212> DNA
 <213> Artificial Sequence
 <220>
 <223> oligonucleotide
 <220>
 <221> misc_feature
 <222> (2)
 <223> biotinylated phosphoramidite residue
 <400> 139
 tngtctccca ggtagacaga gggcttcag 29
 <210> 140
 <211> 29
 <212> DNA
 <213> Artificial Sequence
 <220>
 <223> oligonucleotide
 <220>
 <221> misc_feature
 <222> (2)
 <223> biotinylated phosphoramidite residue
 <400> 140
 anccatctac atgtgcattg acaagctta 29
 <210> 141
 <211> 29
 <212> DNA
 <213> Artificial Sequence
 <220>
 <223> oligonucleotide
 <220>
 <221> misc_feature
 <222> (2)
 <223> biotinylated phosphoramidite residue
 <400> 141
 tngtgataga tcctttcgta acaccaagt 29
 <210> 142
 <211> 29
 <212> DNA
 <213> Artificial Sequence
 <220>
 <223> oligonucleotide
 <220>
 <221> misc_feature

<222> (2)
 <223> biotinylated phosphoramidite residue

 <400> 142
 angaccagat ctcacccagc acatcaaac 29

 <210> 143
 <211> 29
 <212> DNA
 <213> Artificial Sequence

 <220>
 <223> oligonucleotide

 <220>
 <221> misc_feature
 <222> (2)
 <223> biotinylated phosphoramidite residue

 <400> 143
 tntttggggc aagatggctg ttaagcagt 29

 <210> 144
 <211> 29
 <212> DNA
 <213> Artificial Sequence

 <220>
 <223> oligonucleotide

 <220>
 <221> misc_feature
 <222> (2)
 <223> biotinylated phosphoramidite residue

 <400> 144
 tnggttggtc cgggcagggc attcttgtc 29

 <210> 145
 <211> 29
 <212> DNA
 <213> Artificial Sequence

 <220>
 <223> oligonucleotide

 <220>
 <221> misc_feature
 <222> (2)
 <223> biotinylated phosphoramidite residue

 <400> 145
 tnacacgctc tgtgctagga cttttatat 29

 <210> 146
 <211> 29
 <212> DNA
 <213> Artificial Sequence

 <220>
 <223> oligonucleotide

 <220>

<221> misc_feature
 <222> (2)
 <223> biotinylated phosphoramidite residue

 <400> 146
 cnggatgtgt gatattggag cttgctggt 29

 <210> 147
 <211> 29
 <212> DNA
 <213> Artificial Sequence

 <220>
 <223> oligonucleotide

 <220>
 <221> misc_feature
 <222> (2)
 <223> biotinylated phosphoramidite residue

 <400> 147
 ancatcaaag gtgccc aaat aagttccca 29

 <210> 148
 <211> 29
 <212> DNA
 <213> Artificial Sequence

 <220>
 <223> oligonucleotide

 <220>
 <221> misc_feature
 <222> (2)
 <223> biotinylated phosphoramidite residue

 <400> 148
 anatcactgc atttgttctg gaacctgac 29

 <210> 149
 <211> 29
 <212> DNA
 <213> Artificial Sequence

 <220>
 <223> oligonucleotide

 <220>
 <221> misc_feature
 <222> (2)
 <223> biotinylated phosphoramidite residue

 <400> 149
 gntgacttca atctcctcac cttccaccg 29

 <210> 150
 <211> 29
 <212> DNA
 <213> Artificial Sequence

 <220>
 <223> oligonucleotide

<220>
 <221> misc_feature
 <222> (2)
 <223> biotinylated phosphoramidite residue

 <400> 150
 gnagtgccac ctatgactac caaattctc 29

 <210> 151
 <211> 29
 <212> DNA
 <213> Artificial Sequence

 <220>
 <223> oligonucleotide

 <220>
 <221> misc_feature
 <222> (2)
 <223> biotinylated phosphoramidite residue

 <400> 151
 gngggatgag gcaatgaaca caatgaaag 29

 <210> 152
 <211> 29
 <212> DNA
 <213> Artificial Sequence

 <220>
 <223> oligonucleotide

 <220>
 <221> misc_feature
 <222> (2)
 <223> biotinylated phosphoramidite residue

 <400> 152
 cnaaactggt gtttttaccg tatccttca 29

 <210> 153
 <211> 29
 <212> DNA
 <213> Artificial Sequence

 <220>
 <223> oligonucleotide

 <220>
 <221> misc_feature
 <222> (2)
 <223> biotinylated phosphoramidite residue

 <400> 153
 tngattctgc cgaatccgaa agtgctctc 29

 <210> 154
 <211> 29
 <212> DNA
 <213> Artificial Sequence

 <220>
 <223> oligonucleotide

<220>
 <221> misc_feature
 <222> (2)
 <223> biotinylated phosphoramidite residue

 <400> 154
 angttgatgg gctcaacaca gggcagagg 29

 <210> 155
 <211> 29
 <212> DNA
 <213> Artificial Sequence

 <220>
 <223> oligonucleotide

 <220>
 <221> misc_feature
 <222> (2)
 <223> biotinylated phosphoramidite residue

 <400> 155
 anggatgcca tctctcacc actctgtac 29

 <210> 156
 <211> 29
 <212> DNA
 <213> Artificial Sequence

 <220>
 <223> oligonucleotide

 <220>
 <221> misc_feature
 <222> (2)
 <223> biotinylated phosphoramidite residue

 <400> 156
 anaccaccac ctcgacaggc attccttaa 29

 <210> 157
 <211> 29
 <212> DNA
 <213> Artificial Sequence

 <220>
 <223> oligonucleotide

 <220>
 <221> misc_feature
 <222> (2)
 <223> biotinylated phosphoramidite residue

 <400> 157
 cncctgaggg tagaaggccg ctcaggttt 29

 <210> 158
 <211> 29
 <212> DNA
 <213> Artificial Sequence

 <220>

<223> oligonucleotide
 <220>
 <221> misc_feature
 <222> (2)
 <223> biotinylated phosphoramidite residue
 <400> 158
 tngagtttagc agagcaagaa gcaaggagg 29
 <210> 159
 <211> 29
 <212> DNA
 <213> Artificial Sequence
 <220>
 <223> oligonucleotide
 <400> 159
 tttgcatgta tagttctctg cagtagcat 29
 <210> 160
 <211> 29
 <212> DNA
 <213> Artificial Sequence
 <220>
 <223> oligonucleotide
 <220>
 <221> misc_feature
 <222> (2)
 <223> biotinylated phosphoramidite residue
 <400> 160
 anctgccatg tcaaagagga gccagatga 29
 <210> 161
 <211> 29
 <212> DNA
 <213> Artificial Sequence
 <220>
 <223> oligonucleotide
 <220>
 <221> misc_feature
 <222> (2)
 <223> biotinylated phosphoramidite residue
 <400> 161
 tnaggcttgt gcacttgctg agcttccag 29
 <210> 162
 <211> 29
 <212> DNA
 <213> Artificial Sequence
 <220>
 <223> oligonucleotide
 <220>
 <221> misc_feature

<222> (2)
 <223> biotinylated phosphoramidite residue

 <400> 162
 cnttcgagca ctaagaacgg gacacggta 29

 <210> 163
 <211> 29
 <212> DNA
 <213> Artificial Sequence

 <220>
 <223> oligonucleotide

 <220>
 <221> misc_feature
 <222> (2)
 <223> biotinylated phosphoramidite residue

 <400> 163
 angagaagtt ctgtgcgtgg gtctggtcg 29

 <210> 164
 <211> 29
 <212> DNA
 <213> Artificial Sequence

 <220>
 <223> oligonucleotide

 <220>
 <221> misc_feature
 <222> (2)
 <223> biotinylated phosphoramidite residue

 <400> 164
 angtcgttct gcaccaggcc tctgtagcg 29

 <210> 165
 <211> 29
 <212> DNA
 <213> Artificial Sequence

 <220>
 <223> oligonucleotide

 <220>
 <221> misc_feature
 <222> (2)
 <223> biotinylated phosphoramidite residue

 <400> 165
 gntcatctcc agcaccatct ccatcaatg 29

 <210> 166
 <211> 20
 <212> DNA
 <213> Artificial Sequence

 <220>
 <223> oligonucleotide

 <400> 166

actgtctttg aatggtattg 20

<210> 167
 <211> 29
 <212> DNA
 <213> Artificial Sequence

<220>
 <223> oligonucleotide

<220>
 <221> misc_feature
 <222> (2)
 <223> biotinylated phosphoramidite residue

<400> 167
 angttcacat atgatacaag gctctttcc 29

<210> 168
 <211> 29
 <212> DNA
 <213> Artificial Sequence

<220>
 <223> oligonucleotide

<220>
 <221> misc_feature
 <222> (2)
 <223> biotinylated phosphoramidite residue

<400> 168
 cnagtagaca gcacaggtag tcggcttga 29

<210> 169
 <211> 29
 <212> DNA
 <213> Artificial Sequence

<220>
 <223> oligonucleotide

<220>
 <221> misc_feature
 <222> (2)
 <223> biotinylated phosphoramidite residue

<400> 169
 gngaattgcaa tatgaagaaa acaggtcag 29

<210> 170
 <211> 29
 <212> DNA
 <213> Artificial Sequence

<220>
 <223> oligonucleotide

<220>
 <221> misc_feature
 <222> (2)
 <223> biotinylated phosphoramidite residue

<400> 170
anatcaaggt gattaggctc ttccatgca 29

<210> 171
<211> 29
<212> DNA
<213> Artificial Sequence

<220>
<223> oligonucleotide

<220>
<221> misc_feature
<222> (2)
<223> biotinylated phosphoramidite residue

<400> 171
tntacattca atgcctttgc ttctgctg 29

<210> 172
<211> 29
<212> DNA
<213> Artificial Sequence

<220>
<223> oligonucleotide

<220>
<221> misc_feature
<222> (2)
<223> biotinylated phosphoramidite residue

<400> 172
antccatgag accaccctaa actgtccat 29

<210> 173
<211> 29
<212> DNA
<213> Artificial Sequence

<220>
<223> oligonucleotide

<220>
<221> misc_feature
<222> (2)
<223> biotinylated phosphoramidite residue

<400> 173
gngaggaaaa gtgctctgtg ttgatgtat 29

<210> 174
<211> 29
<212> DNA
<213> Artificial Sequence

<220>
<223> oligonucleotide

<220>
<221> misc_feature
<222> (2)
<223> biotinylated phosphoramidite residue

<400> 174
antccacctt ctgccatgat taccagct 29

<210> 175
<211> 29
<212> DNA
<213> Artificial Sequence

<220>
<223> oligonucleotide

<220>
<221> misc_feature
<222> (2)
<223> biotinylated phosphoramidite residue

<400> 175
anccaagatg cagaggtga tgaaggcac 29

<210> 176
<211> 29
<212> DNA
<213> Artificial Sequence

<220>
<223> oligonucleotide

<220>
<221> misc_feature
<222> (2)
<223> biotinylated phosphoramidite residue

<400> 176
tntaatgcct gaaaagatgt gtgtctcct 29

<210> 177
<211> 388
<212> PRT
<213> Homo sapiens

<400> 177
Met His Leu Tyr Lys Thr Asn Lys Met Thr Ser Leu Lys Glu Asp Val
1 5 10 15
Arg Arg Ser Ala Met Leu Cys Ile Leu Thr Val Pro Ala Ala Met Thr
20 25 30
Ser His Asp Leu Met Lys Phe Val Ala Pro Phe Asn Glu Val Ile Glu
35 40 45
Gln Met Lys Ile Ile Arg Asp Ser Thr Pro Asn Gln Tyr Met Val Leu
50 55 60
Ile Lys Phe Arg Ala Gln Ala Asp Ala Asp Ser Phe Tyr Met Thr Cys
65 70 75 80
Asn Gly Arg Gln Phe Asn Ser Ile Glu Asp Asp Val Cys Gln Leu Val
85 90 95
Tyr Val Glu Arg Ala Glu Val Leu Lys Ser Glu Asp Gly Ala Ser Leu
100 105 110

6069-74A.SEQ.txt

Pro Val Met Asp Leu Thr Glu Leu Pro Lys Cys Thr Val Cys Leu Glu
115 120 125
Arg Met Asp Glu Ser Val Asn Gly Ile Leu Thr Thr Leu Cys Asn His
130 135 140
Ser Phe His Ser Gln Cys Leu Gln Arg Trp Asp Asp Thr Thr Cys Pro
145 150 155 160
Val Cys Arg Tyr Cys Gln Thr Pro Glu Pro Val Glu Glu Asn Lys Cys
165 170 175
Phe Glu Cys Gly Val Gln Glu Asn Leu Trp Ile Cys Leu Ile Cys Gly
180 185 190
His Ile Gly Cys Gly Arg Tyr Val Ser Arg His Ala Tyr Lys His Phe
195 200 205
Glu Glu Thr Gln His Thr Tyr Ala Met Gln Leu Thr Asn His Arg Val
210 215 220
Trp Asp Tyr Ala Gly Asp Asn Tyr Val His Arg Leu Val Ala Ser Lys
225 230 235 240
Thr Asp Gly Lys Ile Val Gln Tyr Glu Cys Glu Gly Asp Thr Cys Gln
245 250 255
Glu Glu Lys Ile Asp Ala Leu Gln Leu Glu Tyr Ser Tyr Leu Leu Thr
260 265 270
Ser Gln Leu Glu Ser Gln Arg Ile Tyr Trp Glu Asn Lys Ile Val Arg
275 280 285
Ile Glu Lys Asp Thr Ala Glu Glu Ile Asn Asn Met Lys Thr Lys Phe
290 295 300
Lys Glu Thr Ile Glu Lys Cys Asp Asn Leu Glu His Lys Leu Asn Asp
305 310 315 320
Leu Leu Lys Glu Lys Gln Ser Val Glu Arg Lys Cys Thr Gln Leu Asn
325 330 335
Thr Lys Val Ala Lys Leu Thr Asn Glu Leu Lys Glu Glu Gln Glu Met
340 345 350
Asn Lys Cys Leu Arg Ala Asn Gln Val Leu Leu Gln Asn Lys Leu Lys
355 360 365
Glu Glu Glu Arg Val Leu Lys Glu Thr Cys Asp Gln Lys Asp Leu Gln
370 375 380
Ile Thr Glu Ile
385

<210> 178
<211> 171
<212> PRT
<213> Homo sapiens

<400> 178
Met Met Met Gln Cys Val Ser Arg Met Leu Ala His Pro Leu His Val
1 5 10 15

6069-74A.SEQ.txt

Ile Ser Met Arg Cys Met Val Gln Phe Val Gly Arg Glu Ala Lys Tyr
20 25 30
Ser Gly Val Leu Ser Ser Ile Gly Lys Ile Phe Lys Glu Glu Gly Leu
35 40 45
Leu Gly Phe Phe Val Gly Leu Ile Pro His Leu Leu Gly Asp Val Val
50 55 60
Phe Leu Trp Gly Cys Asn Leu Leu Ala His Phe Ile Asn Ala Tyr Leu
65 70 75 80
Val Asp Asp Ser Phe Ser Gln Ala Leu Ala Ile Arg Ser Tyr Thr Lys
85 90 95
Phe Val Met Gly Ile Ala Val Ser Met Leu Thr Tyr Pro Phe Leu Leu
100 105 110
Val Gly Asp Leu Met Ala Val Asn Asn Cys Gly Leu Gln Ala Gly Leu
115 120 125
Pro Pro Tyr Ser Pro Val Phe Lys Ser Trp Ile His Cys Trp Lys Tyr
130 135 140
Leu Ser Val Gln Gly Gln Leu Phe Arg Gly Ser Ser Leu Leu Phe Arg
145 150 155 160
Arg Val Ser Ser Gly Ser Cys Phe Ala Leu Glu
165 170

<210> 179

<211> 142

<212> PRT

<213> Homo sapiens

<400> 179

Met His Gln Leu Leu Gln Leu Gln Arg Gln Glu Pro Cys Arg Leu Leu
1 5 10 15
Ser Pro Ser Pro Gln Pro Gly Leu His His Leu Cys Phe Gln Gln Ile
20 25 30
Glu Leu Leu Leu Leu Leu Leu His Leu Gln Trp Gly Leu Gly Leu Leu
35 40 45
Arg Gln Leu His His Lys Arg Leu Ala Gln Leu Leu Leu His Arg Arg
50 55 60
Arg Asp His Pro Ile Pro Pro Ile Gln Asp Ile Leu Gly Ile Ala Lys
65 70 75 80
Cys Pro Cys Pro Trp Ala Ile Ile Leu Met Arg Met Ala Ser Ile Ile
85 90 95
Cys His Ile His Gln Cys Ile Thr Arg Val Leu Asp Arg Leu His Thr
100 105 110
Arg Asp Pro Ser Ser Leu His Thr Pro Ser Leu Ser Pro His Ser Ser
115 120 125
Leu Thr Ile His Ser Ser Asn Met Ser Ala Gln Gln Leu Ser
Page 120

130

135

<210> 180
<211> 82
<212> PRT
<213> Homo sapiens

<400> 180

Met Gly Pro Val Ser Ala Gly Ser Gln Gly Cys Gly Thr Cys Ala Val
1 5 10 15

Lys Leu Ala Pro Thr Trp Arg Ala Ala Ala Thr Cys Phe Leu Gln
20 25 30

His Leu Leu Pro Cys Ser Val Ser Ser Leu Ser Pro Arg Leu Ala Gln
35 40 45

Glu Cys Trp Lys Ser Ser Arg Leu Gly Leu Gly Ala Trp Pro Leu Asp
50 55 60

Ile Pro Arg Ala Ser Pro Val Leu Pro Ser Pro Arg Thr Thr Gly Pro
65 70 75 80

Leu Ala

FITZPATRICK, CELLA, HARPER & SCINTO

To	Docketing and File	DATE
FROM		FILE
SUBJECT BENEFIT UNDER 35 U.S.C. § 120 OF PARENT(S) FOR CONTINUATIONS OR DIVISIONALS FILED UNDER 37 C.F.R. § 1.53(b), ETC.		

The following checked items identify whether Amendments have been filed in the subject application and all parent applications to ensure benefit under 35 U.S.C. § 120, and whether an Information Disclosure Statement has been filed:

SELECT A(1) OR A(2)

A(1) ☐

A PRELIMINARY AMENDMENT IS BEING FILED CONCURRENTLY WITH THIS APPLICATION. The Preliminary Amendment cancels any claims not to be examined in the subject application, and also amends the specification to cross reference each parent application and to incorporate the parent application(s) by reference. Check one of the following:

☐

The parent application is not a divisional or continuation of an earlier application.

☐

I have checked all the parent applications (i.e., including grandparents, etc.) that are divisionals or continuations of earlier applications, and the specification has been amended in each such application, where required, to identify all appropriate continuing data.

A(2) ☐

PLEASE DOCKET A PRELIMINARY AMENDMENT TO BE FILED NO LATER THAN TWO WEEKS FROM TODAY.

SELECT B(1) OR B(2)

B(1) ☐

AN INFORMATION DISCLOSURE STATEMENT IS BEING FILED CONCURRENTLY WITH THIS APPLICATION. The IDS cites all the references of record from the parent application(s).

B(2) ☐

PLEASE DOCKET AN INFORMATION DISCLOSURE STATEMENT TO BE FILED NO LATER THAN TWO WEEKS FROM TODAY.

(attorney's initials)

**** A copy of this memo is to be placed in the file.**



UTILITY PATENT APPLICATION TRANSMITTAL

(Only for new nonprovisional applications under 37 CFR 1.53(b))

Attorney Docket No.

00766.000101.1

First Named Inventor or Application Identifier

KENNETH JACOBS

Express Mail Label No.

APPLICATION ELEMENTS

See MPEP chapter 600 concerning utility patent application contents.

ADDRESS TO:

Mail Stop Patent Application
Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

1. ☒ Fee Transmittal Form
(Submit an original, and a duplicate for fee processing)
2. ☐ Applicant claims small entity status.
See 37 CFR 1.27.
3. ☒ Specification *Total Pages*
4. ☒ Drawing(s) (35 USC 113) *Total Sheets*
5. ☒ Oath or Declaration *Total Pages*
- a. ☐ Newly executed (original or copy)
- b. ☒ Copy from a prior application (37 CFR 1.63(d))
(for continuation/divisional with Box 17 completed)
- i. ☐ DELETION OF INVENTOR(S)
Signed Statement attached deleting
inventor(s) named in the prior application, see
37 CFR 1.63(d)(2) and 1.33(b).
6. ☒ Application Data Sheet. See 37 CFR 1.76

7. ☐ CD-ROM or CD-R in duplicate, large table or Computer
Program (*Appendix*)
8. ☐ Nucleotide and/or Amino Acid Sequence Submission
(if applicable, all necessary)
- a. ☐ Computer Readable Form (CRF)
- b. Specification Sequence Listing on:
- i. ☐ CD-ROM or CD-R (2 copies); or
- ii. ☐ paper
- c. ☐ Statements verifying identity of above copies

ACCOMPANYING APPLICATION PARTS

9. ☐ Assignment Papers (cover sheet & document(s))
10. ☐ 37 CFR 3.73(b) Statement ☐ Power of Attorney
(when there is an assignee)
11. ☐ English Translation Document (if applicable)
12. ☐ Information Disclosure ☐ Copies of IDS
Statement (IDS)/PTO-1449 Citations
13. ☒ Preliminary Amendment
14. ☒ Return Receipt Postcard (MPEP 503)
(Should be specifically itemized)
15. ☐ Certified Copy of Priority Document(s)
(if foreign priority is claimed)
16. ☐ Other: _____

17. If a CONTINUING APPLICATION, check appropriate box and supply the requisite information:

☒ Continuation ☐ Divisional ☐ Continuation-in-part (CIP) of prior application No. 09 / 306,111
Prior application information: Examiner _____ Group/Art Unit: _____

For CONTINUATION OR DIVISIONAL APPS only: The entire disclosure of the prior application, from which an oath or declaration is supplied under Box 5b, is considered a part of the disclosure of the accompanying continuation or divisional application and is hereby incorporated by reference. The incorporation can only be relied upon when a portion has been inadvertently omitted from the submitted application parts.

18. CORRESPONDENCE ADDRESS

☒ Customer Number or Bar Code Label (Insert Customer No. or Attach bar code label here) or ☐ Correspondence address below

NAME

Address

City

State

Zip Code

Country

Telephone

Fax



CLAIMS	(1) FOR	(2) NUMBER FILED	(3) NUMBER EXTRA	(4) RATE	(5) CALCULATIONS
	TOTAL CLAIMS (37 CFR 1.16(c))	22-20 =	2	X \$ 18.00 =	\$36.00
	INDEPENDENT CLAIMS (37 CFR 1.16(b))	-3 =		X \$ 86.00 =	\$
	MULTIPLE DEPENDENT CLAIMS (if applicable) (37 CFR 1.16(d))			\$290.00 =	\$
				BASIC FEE (37 CFR 1.16(a))	\$770.00
			Total of above Calculations = \$		
	Reduction by 50% for filing by small entity (Note 37 CFR 1.9, 1.27, 1.28).				
	TOTAL =				\$

19. Small entity status

- a. ☐ A small entity statement is enclosed
- b. ☐ A small entity statement was filed in the prior nonprovisional application and such status is still proper and desired.
- c. ☐ Is no longer claimed.

20. ☒ A check in the amount of \$ _____ to cover the filing fee is enclosed.

21. ☐ A check in the amount of \$ _____ to cover the recordal fee is enclosed.

22. The Commissioner is hereby authorized to credit overpayments or charge the following fees to Deposit Account No. 06-1205:

- a. ☒ Fees required under 37 CFR 1.16.
- b. ☒ Fees required under 37 CFR 1.17.
- c. ☐ Fees required under 37 CFR 1.18.

SIGNATURE OF APPLICANT, ATTORNEY, OR AGENT REQUIRED	
NAME	George K. Ng, Reg. 54,334
SIGNATURE	
DATE	April 8, 2004

